

Economic Value of Bukittinggi City Regional Public Library: Travel Cost Approach and Contingency Valuation

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Abstract: Regional public libraries deliver services without charging admission, making their benefits difficult to observe in local budget accounts. This study estimated the economic value of the Bukittinggi City Regional Public Library and examined correlates of annual visit frequency and willingness to pay (WTP) for voluntary contributions. A cross-sectional survey of 120 library visitors was analyzed using individual travel cost models estimated by ordinary least squares and Poisson regression with robust standard errors, alongside a split-sample contingent valuation survey analyzed with Tobit regression. Official records of 5,050 visits in 2025 were used for annual aggregation. Travel costs were negatively associated with visit frequency, whereas education and satisfaction were positively associated with it. Income, annual visits, and perceived benefits were positively associated with WTP; the bidding-format group reported lower WTP than the open-format group. The reported annual values were IDR 151.5–159.4 million using the travel cost method and IDR 19.6–44.0 million using contingent valuation. The estimates describe different components of users' value and remain sensitive to the aggregation base, on-site sampling, and question format.

Keywords: Economic Value, Public Library, Travel Cost Method, Contingent Valuation Method, Willingness to Pay.

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INTRODUCTION

Public libraries offer educational and information services without requiring users to pay an entry fee, creating a gap between their public value and the amounts visible in conventional accounts. An absence of a market price does not imply an absence of benefit, especially when access supports reading, learning, and everyday information needs. From a public economics perspective, the institution shares features of public and collectively financed services, although congestion and differences in access can limit fully non-rival use (Samuelson, 1954). Contemporary cultural economics also distinguishes benefits realized during consumption from wider social and cultural outcomes that cannot be measured through visits alone (Bille, 2024; Bille & Noonan, 2026; Audunson et al., 2019; Vårheim et al., 2019). For a city government, the valuation problem is therefore not simply how much users could be charged, but which benefits remain invisible when services are financed through public budgets.

The Bukittinggi City Regional Public Library provides a relevant setting because both recorded utilization and budget allocations have fluctuated. Its reported annual visits declined from 10,660 in 2021 to 5,050 in 2025, while regular library allocations were approximately 0.64–1.00% of the regional budget, with a larger 2025 allocation associated with a special building-related allocation (Bukittinggi City Regional Finance Agency, 2025; Bukittinggi City Library and Archives Service, 2026). These figures describe changes in administrative records rather than establishing that the underlying social need declined by the same magnitude. They also reveal an important distinction between expenditures on library operations and public funds assigned to infrastructure or other administrative functions. Without a compatible measure of service benefits and users, expenditure comparisons can obscure rather than clarify the role of the library.

Literacy indicators provide further context for why monetary measures should be interpreted alongside social objectives. Bukittinggi's Reading Love Score rose from 62.40 in 2022 to 74.41 in 2024, while its Community Literacy Development Index moved from 99.01 in 2022 to 83.30 in 2023 and then 97.70 in 2024. These trends cannot be attributed to the library without a causal design, but they illustrate the municipality's continuing policy interest in literacy development. Public libraries may also function as shared spaces that support inclusion and social connection (Wojciechowska, 2021; Igarashi et al., 2023; Du et al., 2026). Research on community practices and library programming suggests that institutional value extends beyond the book-lending transaction (Jamal et al., 2023; Nguyen, 2025; Wojciechowska & Topolska, 2021).

International research offers several approaches for connecting library activities to economic and social value. Gilpin et al. (2024) associated library capital investment with subsequent increases in use and reading achievement, whereas Ferreira Neto et al. (2025) examined links between library openings and local crime outcomes. Other studies have measured benefits in terms of social return on investment or integrated valuation frameworks rather than restricting assessment to service revenue (De Leon, 2021; Gómez-Zapata & del Barrio-Tellado, 2023; Gómez-Zapata et al., 2018; Cho & Ho, 2026; Real et al., 2026). Research on cultural institutions likewise shows that non-market contributions and externalities are not necessarily captured by an institution's direct attendance statistics (Falk et al., 2025; Halkos et al., 2024; Blanchard et al., 2026). These studies support the policy relevance of valuation while also showing why results depend on what the analyst chooses to measure.

Two established methods are especially relevant to the present case. The travel cost method (TCM) infers demand from expenditure incurred to reach a site and, under specified assumptions, yields a measure of use-related consumer surplus (Clawson & Knetsch, 1966; Lupi et al., 2020; Hanley & Czajkowski, 2019). Recent applications to cultural heritage and recreational services show the method's flexibility while emphasizing the importance of travel purpose, visitor selection, and the definition of trip costs (Juutinen et al., 2022; Espinosa-Casero & Herrero-Prieto, 2026; Fantechi et al., 2026; Antinori et al., 2026; Torres-Ortega et al., 2018; Putri & Irfan, 2023). The contingent valuation method (CVM), in contrast, asks respondents to state a willingness to pay under a specified hypothetical arrangement (Mitchell & Carson, 1989; Johnston et al., 2017). The latter approach has been used to value library services, heritage protection, and public-service improvements, although the results remain sensitive to the payment scenario and respondents' beliefs (Gómez-Zapata et al., 2025; Benedetto et al., 2022; Ha et al., 2025; Hwang, 2025; Kwak & Yoo, 2012).

The contrast between observed travel behavior and stated voluntary contributions creates a substantive methodological question. Existing library studies often emphasize contingent valuation or social return measures, as illustrated by Fujiwara et al. (2019), Gómez-Zapata et al.

(2025), Noh and Song (2025), and Kim and Pyo (2026), while studies of cultural destinations more frequently model visitors' travel demand (Pramono & Saptutyningsih, 2023). Both families of methods can inform policy, but they need not represent the same welfare construct or population. Studies of contingent valuation in other public-service settings show that payment contexts and perceptions can affect stated WTP (Park & Yoon, 2024; Waring & Longo, 2025; Drupp et al., 2025; Tefera & Wassie, 2026). The original literature also identifies hypothetical and starting-point effects as threats to simple comparisons across survey formats (Haghani et al., 2021; Ahtiainen et al., 2023; Vossler & Zawojka, 2020; Boyle et al., 1985; Glenk et al., 2019).

Against this background, the present study pursued three objectives: to estimate the annual economic value attributed to the Bukittinggi City Regional Public Library using TCM and CVM, to identify variables associated with visitors' annual frequency of use, and to examine correlates of voluntary donation WTP, including the question format. Its contribution is an application of revealed- and stated-preference approaches to the same free municipal library, rather than a claim that the resulting values are interchangeable. The split-sample survey also provides a comparison between an initial-bid format and an open-ended question under the specific designs used. Because the research relies on an on-site cross-sectional sample and aggregate visit records, the estimates are interpreted as model-based approximations of surveyed users' benefits rather than a complete valuation of all social returns. This distinction is relevant to library management decisions that must balance observed demand, inclusion objectives, and credible public records.

METHOD

Research Design, Study Setting, and Participants

This study used a cross-sectional, descriptive-explanatory quantitative design to examine the economic value of the Bukittinggi City Regional Public Library in West Sumatra, Indonesia. The primary data were obtained through a structured questionnaire administered to 120 on-site library users aged at least 15 years who had visited the facility within the preceding 12 months. The sampling procedure was described as systematic on-site sampling and applied the rule $N \geq 50 + 8m$ for eight predictors when determining the sample size (Green, 1991). Secondary records on annual visits, visitor characteristics, and budget allocations were supplied by the municipal library and regional finance agencies (Bukittinggi City Regional Finance Agency, 2025; Bukittinggi City Library and Archives Service, 2026). The cross-sectional design allows examination of associations and reported welfare measures within the respondent group, not causal effects on library attendance or donation behavior.

Survey Instrument and Operational Definitions

The instrument comprised five components: participant eligibility, respondent characteristics, visit frequency and travel costs, perceptions of library services, and willingness to pay. The dependent variable for the travel cost models was annual library visits in the preceding 12 months (Y1), with predictors comprising round-trip transportation and consumption expenses per visit (X1), distance from home (X2), age (X3), education coded from 1 to 8 (X4), monthly income (X5), presence of alternative literacy sources (X6, binary), facilities and service perception (X7, five-point scale), and satisfaction (X8, five-point scale). For contingent valuation, willingness to make a voluntary donation per visit (Y2) was the outcome; its predictors included X3, X4, X5, X6, X8, annual visit frequency (X9), perceived benefits (X10, five-point scale), and the question-format indicator D_FormatA. Survey scales were evaluated using item-total correlation and Cronbach's alpha, with reported item-total coefficients of 0.717–0.875 and alpha estimates of

0.804–0.841. Reported VIF values ranged from 1.11 to 4.54, providing the study's reported indication that excessive multicollinearity was not evident among the modeled predictors.

Data Collection and Research Procedure

Eligible library visitors completed the questionnaire during on-site data collection, and the analysis used all 120 completed survey responses. Annual visit frequency referred to respondents' previous 12 months, whereas the official administrative total used for aggregation was 5,050 recorded visits in 2025. The CVM questionnaire presented a hypothetical voluntary donation for maintenance and development of the library, explicitly retaining free access to library services. Respondents were randomly assigned to two groups of 60: Group A answered a bidding-format question with an initial amount of IDR 5,000 and points of IDR 5,000, 7,500, 10,000, 15,000, 20,000, 25,000, and 30,000, while Group B provided an open-ended amount. The workflow linking questionnaire responses, administrative records, estimation, and annual aggregation is displayed in Figure 1.

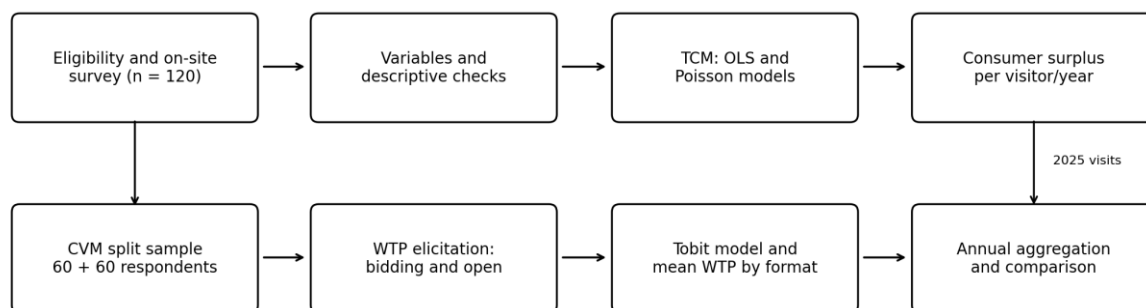


Figure 1. Research workflow for travel cost and contingent valuation models.

Figure 1 presents two analytical branches based on the same on-site survey and the official annual visit records. The upper branch links travel expenditures and individual characteristics to visit-frequency models and consumer surplus calculations. The lower branch separates the two willingness-to-pay question formats before estimating their reported contributions. Both branches are combined only at the final stage of annual aggregation and comparison. The diagram represents the documented analytical sequence and does not imply that the estimates measure identical welfare components.

Travel Cost Method and Consumer Surplus

The individual travel cost method related the number of annual visits to travel expenditures and seven other respondent characteristics. Ordinary least squares (OLS) and Poisson regressions were estimated with robust standard errors; Poisson regression was included because the outcome was a count of visits (Englin & Shonkwiler, 1995; Lupi et al., 2020; Dundas & von Haefen, 2020; Ghermandi et al., 2020). The OLS equation was $Y1_i = \beta_0 + \beta_1 X1_i + \beta_2 X2_i + \beta_3 X3_i + \beta_4 X4_i + \beta_5 X5_i + \beta_6 X6_i + \beta_7 X7_i + \beta_8 X8_i + \varepsilon_i$, while the Poisson specification was $\ln E(Y1_i) = \beta_0 + \beta_1 X1_i + \dots + \beta_8 X8_i$. Annual consumer surplus was specified as $CS_i(\text{OLS}) = Y1_i^2 / [2|\beta_1|]$ and $CS_i(\text{Poisson}) = Y1_i / |\beta_1|$, with β_1 denoting the travel cost coefficient under the relevant model. The resulting values are conditional on the assumed demand specification and the on-site sampling process.

For annual aggregation, the analysis divided the 5,050 recorded visits in 2025 by the respondent mean of 8.15 visits per year to obtain approximately 620 distinct users. It then multiplied the mean individual annual consumer surplus by that estimated number. Travel time was excluded from monetary travel costs, whereas the expenditure definition included transportation and consumption for a round trip. The value of travel time and the allocation of

expenses on multi-purpose trips can change travel cost estimates (Czajkowski et al., 2019; Lloyd-Smith et al., 2019; Espinosa-Casero & Herrero-Prieto, 2026). Because on-site respondents may disproportionately represent frequent visitors, the implied number of distinct users and its aggregate value should be interpreted within that sampling limitation rather than as a direct count of all residents who use the library (Antinori et al., 2026; Gonyo et al., 2024).

Contingent Valuation and Willingness to Pay

The contingent valuation scenario asked whether respondents would contribute voluntarily to library maintenance and service development without a charge for access. The analysis retained zero responses, including those motivated by objections to user contributions, and reported 47 respondents with WTP equal to zero. The study modeled WTP using a left-censored Tobit specification (Tobin, 1958), $Y2_i^* = \gamma_0 + \gamma_1 X3_i + \gamma_2 X4_i + \gamma_3 X5_i + \gamma_4 X6_i + \gamma_5 X8_i + \gamma_6 X9_i + \gamma_7 X10_i + \gamma_8 D_FormatA_i + u_i$, with observed $Y2_i = \max(0, Y2_i^*)$. The annual CVM estimate multiplied mean WTP per visit for each format, including zero responses, by the 5,050 recorded visits. This design compares the reported WTP from two elicitation formats, but the common starting point within the bidding arm does not separately identify the effect of format and the initial bid (Haghani et al., 2021; Ahtiainen et al., 2023; Hwang, 2025).

Data Analysis and Interpretation

IBM SPSS Statistics was used for the TCM analyses and Stata for the Tobit regression; the analysis also included descriptive statistics, validity and reliability checks, variance inflation factors, and tests comparing WTP responses across formats. Statistical significance was interpreted using the probabilities reported in the manuscript, without treating associations as causal effects. TCM and CVM were aggregated using different units because annual consumer surplus was measured per person, while voluntary WTP was measured per visit. The estimates should not be added to one another because they capture overlapping or conceptually distinct aspects of value under different respondent and payment assumptions (Bille, 2024; Cho & Ho, 2026). The analysis did not measure non-user values or all indirect community benefits, which distinguishes the reported totals from a complete social return-on-investment assessment (De Leon, 2021; Real et al., 2026).

RESULTS

Respondent Characteristics and Descriptive Statistics

Among the 120 respondents, women accounted for 60%, and 38.3% were aged 15–24 years. Fifty percent had completed high school or an equivalent qualification, while 37.5% reported education in the diploma-to-postgraduate group. Schoolchildren, university students, and private-sector employees each accounted for 19.2%, and 44.2% had a monthly income below IDR 1 million. The study reported item-total correlations from 0.717 to 0.875, Cronbach's alpha values from 0.804 to 0.841, and VIF values from 1.11 to 4.54. Table 1 provides the observed ranges and means for the variables included in the analyses. The corresponding estimates are summarized in Table 1.

Table 1. Descriptive Statistics of Research Variables (n = 120)

Variables	Minimum	Maximum	Average
Frequency of visits (Y1/X9, times/year)	1	38	8.15
Travel costs (X1, Rp)	0	58,000	11,883
Distance (X2, km)	0.6	89.8	9.96
Age (X3, years)	15	68	33.57
Education (X4, scale 1 to 8)	2	8	4.86
Income (X5, million Rp/month)	0.5	6.0	1.74

Variables	Minimum	Maximum	Average
Alternative source (X6, 0/1)	0	1	0.65
Facilities (X7, score 1 to 5)	2.4	5.0	3.77
Satisfaction (X8, score 1 to 5)	2.0	5.0	3.72
Benefits (X10, score 1 to 5)	2.0	5.0	3.92
WTP (Y2, Rp/visit)	0	25,000	6,292

Table 1 shows that annual visits ranged from 1 to 38, with an average of 8.15 visits per respondent. Mean round-trip expenditure was IDR 11,883, while the average reported distance was 9.96 km. The average respondent age was 33.57 years and monthly income averaged IDR 1.74 million. Mean scores for facility perception, satisfaction, and perceived benefits were 3.77, 3.72, and 3.92, respectively. Average stated WTP was IDR 6,292 per visit across the complete sample, including zero responses.

Correlates of Annual Visit Frequency

The travel cost regressions addressed variation in respondents' annual visit frequency. Both OLS and Poisson models reported a negative travel cost coefficient, whereas education and satisfaction had positive associations in both specifications. Distance was statistically significant in the Poisson model but not in OLS, and income was negative with a p value of 0.034 in OLS and 0.079 in Poisson. Age and perceived facilities were not statistically significant in either model. Table 2 summarizes the coefficients and associated probability values for the two models. The corresponding estimates are summarized in Table 2.

Table 2. Travel Cost Method Model Estimation Results

Variables	OLS Robust B	Sig.	Poisson Robust B	Sig.
Constant	-3,056	0.522	1,234	0.012
Travel costs (X1)	-<0.00123	0.001	-<0.0010317	0.020
Distance (X2)	-0.138	0.188	-0.062	<0.001
Age (X3)	-0.004	0.918	-0.001	0.841
Education (X4)	1,276	0.007	0.120	0.001
Income (X5)	-1,029	0.034	-0.106	0.079
Alternative sources (X6)	-0.764	0.462	0.194	0.060
Facilities (X7)	0.366	0.681	0.024	0.800
Satisfaction (X8)	2,523	0.018	0.272	0.003

Note: Dependent variable: annual visits (Y1). OLS $R^2 = 0.449$, $F = 11.294$ ($p < .001$). Source: Data processed using IBM SPSS Statistics.

Table 2 reports a statistically significant negative association between travel expenditures and visit frequency in both models. Education and satisfaction were positively associated with reported annual visits after adjustment for the included characteristics. Distance was negative and statistically significant only in the Poisson specification. Income was negative in both models, although its Poisson probability did not meet the 5% significance threshold. Together, the two specifications indicate an inverse association between travel costs and visits within the cross-sectional respondent sample.

Willingness to Pay and Question Formats

Seventy-three respondents (60.8%) indicated a positive willingness to contribute, whereas 47 reported WTP of zero. Mean WTP was IDR 8,708 in the open-ended group and IDR 3,875 in the bidding group, and the analysis found a significant between-group difference using both a t test and a Mann-Whitney test. The Tobit model had a reported likelihood-ratio chi-square of 63.52 ($p < .001$) and pseudo- R^2 of 0.039. Income, visit frequency, and perceived benefits had positive significant coefficients, whereas the bidding-format dummy had a negative significant

coefficient. The full coefficients and significance values are shown in Table 3. The corresponding estimates are summarized in Table 3.

Table 3. Estimation Results of the Tobit Model of Willingness to Pay

Variables	Coefficient	t	Sig.
Age (X3)	-88.41	-1.42	0.158
Education (X4)	746.18	1.43	0.155
Income (X5)	2,591.23	3.92	<0.001
Alternative sources (X6)	-2,024.89	-1.40	0.164
Satisfaction (X8)	-734.04	-0.60	0.549
Frequency of visits (X9)	378.76	3.51	0.001
Perceived benefits (X10)	3,884.69	2.99	0.003
D_FormatA (bidding = 1)	-4,587.66	-3.40	0.001
Constant	-12,996.05	-1.96	0.052

Note: Outcome: WTP (IDR per visit), modeled as left-censored at zero for 47 observations. LR $\chi^2 = 63.52$ ($p < .001$), pseudo- $R^2 = 0.039$. Source: Data processed using Stata.

Table 3 indicates that monthly income, annual visits, and perceived benefits were positively associated with stated WTP. The question-format indicator was negative and statistically significant for respondents assigned to the bidding arm. Age, education, the availability of alternative sources, and satisfaction did not have statistically significant coefficients. The reported pseudo- R^2 of 0.039 indicates that explanatory fit should be described cautiously rather than characterized as strong. The Tobit coefficients concern the model's latent outcome and are not directly equivalent to marginal changes in observed mean WTP.

Of the 47 respondents reporting WTP of zero, 18 referred to the government's responsibility to finance libraries, 15 reported financial constraints, eight had not perceived sufficient benefits, and six raised concerns about fund governance. These responses show that zero contributions did not reflect one common motivation. Keeping all zero amounts preserves the original aggregation convention but blends financial constraints, low stated benefits, and principled objections into a single monetary response. Studies of stated preferences show that the meaning of the payment scenario can shape responses independently of the underlying public good (Frey & Pirscher, 2019; Hwang, 2025). The split-sample finding should therefore be described as a difference between the two implemented survey arms rather than a separately identified pure starting-bid effect.

Economic Value Estimates

The analysis produced two annual TCM estimates and two CVM estimates from the respective fitted models and stated responses. Mean annual consumer surplus was reported as IDR 244,348 in the OLS specification and IDR 257,097 in the Poisson specification, with an approximate aggregation base of 620 unique visitors. The two CVM means were IDR 3,875 and IDR 8,708 per visit, multiplied by 5,050 annual visits. Table 4 presents the resulting annual figures as obtained from the study calculations. The corresponding estimates are summarized in Table 4.

Table 4. Economic Value of the Bukittinggi City Regional Public Library

Approach	Basis of calculation	Annual value (Rp)
TCM, OLS model	CS Rp244,347.8 per person $\times$ 620 people	151,495,652
TCM, Poisson model	CS Rp257,097 per person $\times$ 620 people	159,400,630
CVM, bidding format	WTP Rp3,875 $\times$ 5,050 visits	19,568,750
CVM, open format	WTP Rp8,708 $\times$ 5,050 visits	43,977,066

Table 4 shows reported annual TCM values of approximately IDR 151.5 million under OLS and IDR 159.4 million under Poisson regression. CVM estimates were substantially lower, at approximately IDR 19.6 million under the bidding format and IDR 44.0 million under the open-ended format. The TCM aggregation uses estimated distinct annual users, while CVM uses the observed count of annual visits. Small differences between rounded inputs and reported aggregate totals may arise from calculations performed before rounding. The values should be treated as model- and scenario-specific approximations rather than separate amounts to be summed. The magnitude of the four valuation estimates is displayed in Figure 2 to emphasize their differences in scale and measurement.

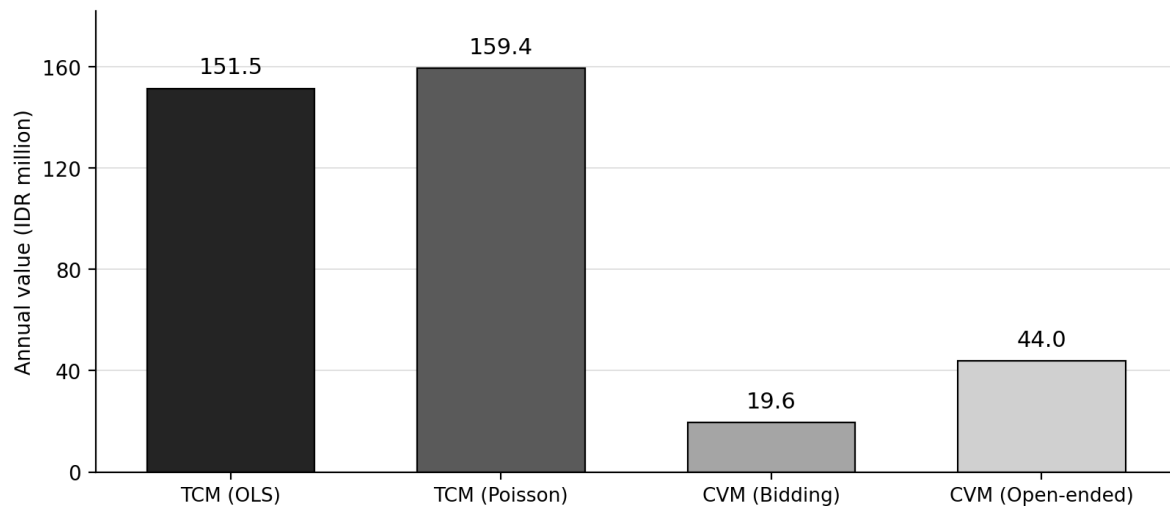


Figure 2. Comparison of annual economic value by estimation approach (source: Table 4).

Figure 2 shows that the two travel cost estimates are close to each other, while the contingent valuation estimates vary more widely by question format. The Poisson estimate is slightly higher than the OLS-based estimate for the same library and aggregation year. The open-ended donation estimate is more than twice the bidding-format estimate in the reported results. These relative magnitudes cannot be interpreted as a direct ranking of accuracy because the approaches measure distinct concepts and use different aggregation units. The visual comparison is therefore descriptive and does not constitute a cost-benefit assessment of the complete library budget.

Discussion

The inverse association between travel costs and library use is consistent with the demand logic of individual travel cost valuation. For visitors who must allocate money to transport and related expenses, a nominally free service still carries a personal cost of access. Similar demand relationships are documented in analyses of cultural heritage and recreational settings, although their outcomes depend on the definition of costs and the modeling of trip frequency (Juutinen et al., 2022; Espinosa-Casero & Herrero-Prieto, 2026; Fantechi et al., 2026). The result is therefore economically plausible, but the specific surplus value is conditional on the reported coefficient and frequency-based sampling assumptions. Evidence from mobility-based recreation models illustrates how different data sources and sampling frames can affect economic estimates (Gonyo et al., 2024; Antinori et al., 2026; Sinclair et al., 2020). In the Bukittinggi setting, improved identification of distinct users would strengthen the conversion from respondent-level benefits to annual municipal totals.

Education and service satisfaction were positively associated with repeated library visits, while perceived facilities were not statistically significant after adjustment for the other predictors. The education association is consistent with literature on cultural participation and with the educational role of libraries (Suarez-Fernandez et al., 2020; Bille, 2024; Ateca-Amestoy et al., 2020). Satisfaction may reflect whether collections, staff assistance, and service arrangements meet users' immediate needs, although the present survey does not establish which specific service components produced the association. Research into library social capital and inclusion also suggests that interaction and institutional trust can matter alongside physical infrastructure (Wojciechowska & Topolska, 2021; Igarashi et al., 2023; Du et al., 2026; Tan et al., 2017). The findings support attention to visitor experience without showing that investing in any one facility attribute would independently increase visits. This distinction helps align practical recommendations with the limits of the cross-sectional evidence.

The coefficient for distance differed between OLS and Poisson models, and income had a negative association with visits under the specifications reported. One possible explanation is that travel cost and distance overlap in the access burden they represent, leaving their separate coefficients sensitive to functional form. Differences in access to alternative literacy resources may also shape how higher-income individuals use a free municipal library, but such mechanisms were not independently tested in this dataset. Work on spatial access to libraries demonstrates that physical distance, service capacity, and local conditions can jointly shape availability (Takvi et al., 2023; McMenemy et al., 2023). Antinori et al. (2026) similarly show why assumptions about income and demand for low-cost amenities need to be examined rather than imposed. For Bukittinggi, the results indicate a potential equity question that can motivate service planning, not a causal estimate of what mobile libraries or reading corners would achieve.

The CVM findings associate higher income, greater visit frequency, and more favorable perceived benefits with larger voluntary contributions. This pattern is compatible with economic constraints on stated contributions and with the view that direct users may recognize immediate library benefits more readily than those with less frequent contact. Existing library valuations have found economically meaningful willingness to contribute, while showing that the choice of respondent population and valuation scenario shapes reported values (Fujiwara et al., 2019; Gómez-Zapata et al., 2025; Gómez-Zapata & del Barrio-Tellado, 2023; Gómez-Zapata et al., 2018). Evidence on willingness to pay for other public services likewise suggests that preferences depend on the intervention described and on individual circumstances (Park & Yoon, 2024; Waring & Longo, 2025; Drupp et al., 2025). The nonsignificant coefficient for satisfaction should not be taken to imply that satisfaction is unimportant; it may operate differently in participation and monetary decisions. Within this sample, perceived benefits were the more informative positive predictor of stated contributions after adjustment for the modeled variables.

The more than twofold gap between open-ended and bidding-format WTP is a central empirical result, but the survey design supports a narrower conclusion than a direct causal estimate of starting-point bias. The bidding arm had one initial amount of IDR 5,000 and a specified price sequence, whereas the comparison arm had no explicit monetary starting point. The format indicator therefore captures a bundle of design differences that cannot be separated statistically from the starting amount within this experiment. The broader stated-preference literature documents cost-vector, elicitation, and survey framing effects that make such sensitivity plausible (Ahtiainen et al., 2023; Haghani et al., 2021; Hwang, 2025; Ha et al., 2025; Penn & Hu, 2019). Yet the direction and magnitude of the observed difference should not automatically be transferred to a different library, bidding sequence, or population. This methodological

qualification does not diminish the observed difference, but it changes how policymakers should interpret it.

The distribution of zero WTP responses provides additional context for the valuation exercise. Those who favored government financing or questioned donation governance might have rejected the payment mechanism while continuing to value the service itself. Respondents citing financial constraints or insufficient personal benefits expressed different reasons for the same reported amount. Prior research on protest responses warns against equating all zero contributions with an absence of welfare value (Frey & Pirscher, 2019), while studies of public and cultural services recognize non-market benefits that may exceed voluntary donations (Bille, 2024; Falk et al., 2025; Halkos et al., 2024; Wiśniewska et al., 2020; Blanchard et al., 2026). Retaining the zeros makes the aggregation transparent and follows the adopted study design, but it does not resolve these distinctions. A future survey could separately classify reasons for zero WTP when assessing policy relevance.

The reported TCM values, about IDR 151.5–159.4 million annually, are materially larger than the CVM donation totals, about IDR 19.6–44.0 million. Interpreting the lower contingent valuation estimate as an error would overlook that the scenario asked users about an additional voluntary payment for an already free service. TCM instead uses travel expenditure to infer an access-related surplus from existing visits, and it converts modeled benefits from a visitor-based sample into an annual total. Recent integrated valuation studies explicitly separate direct service benefits from broader returns and caution against unexamined aggregation across methods (Cho & Ho, 2026; Real et al., 2026; De Leon, 2021; Handke & Dalla Chiesa, 2022). The Bukittinggi estimates add a comparative example for a municipal library, but they cannot be compared to total institutional expenditure as though all budget functions and all benefit categories were equivalent. The reported 2024 budget of roughly IDR 5.2 billion included functions beyond the valued direct user visits, including archives and construction-related expenditure.

The practical contribution of the study lies in clarifying what must be measured before economic values become reliable budgeting inputs. First, an integrated record of repeat visits and distinct individuals would reduce reliance on estimating the user population from an on-site survey mean. Second, future CVM work should separate alternative initial bids and payment arrangements to distinguish responses to the hypothetical mechanism from preferences for the library itself. Third, a wider accounting of non-user benefits, educational consequences, and community functions would complement visitor-based measures without simply adding incompatible totals. Studies on library investment, social connection, and public-service value show that the institutional benefits under consideration are not limited to physical attendance or a single donation question (Gilpin et al., 2024; Ferreira Neto et al., 2025; Cho & Ho, 2026; Du et al., 2026). These priorities follow directly from the strengths and boundaries of the present results rather than from an assumption that either valuation method delivers the definitive total economic value of the library.

Policy Implications

The results suggest that library budgeting would benefit from a user-recording system that distinguishes unique visitors from total entries, because the two quantities support different economic valuation units. Library managers can prioritize the quality of visitors' service experience and accessibility when reviewing programs, although the cross-sectional associations do not establish a causal return from any specific investment. If voluntary contributions are considered, they should remain independent of access rights and be accompanied by clear explanations of how funds would be governed and allocated. The observed heterogeneity in zero

WTP responses argues against treating a single average contribution as a realistic mandatory fee. The purpose of such valuations is to complement literacy and service indicators, rather than replace them with a narrow revenue benchmark.

Limitations And Future Research

The study used 120 on-site respondents, making the sample more informative about users than about non-users or residents who face barriers to visiting. The Poisson and OLS models were reported with robust standard errors, but the published information does not establish that all effects of on-site sampling, truncation, or visit-frequency weighting were addressed. The TCM calculation excluded travel time and was potentially affected by multi-purpose travel, while the number of unique users was inferred from an average visit frequency rather than directly counted. The CVM comparison cannot isolate starting-bid effects from the question-format contrast, and WTP zero responses reflect several motivations. Future research could collect differentiated user records, expand coverage to non-users, examine alternative count-data specifications, and test multiple starting bids without assuming the present reported data already resolve these questions.

CONCLUSIONS

The study combined individual travel cost and contingent valuation approaches to describe the economic value associated with use of the Bukittinggi City Regional Public Library. Among 120 on-site respondents, travel expenditure was negatively associated with the reported frequency of annual visits, whereas education and satisfaction were positively associated with it. Income, annual visit frequency, and perceived benefits were positively associated with stated donation WTP, and the bidding-format group reported a lower WTP than the open-ended group. The estimated annual values were IDR 151.5–159.4 million from TCM and IDR 19.6–44.0 million from CVM. These figures capture different measurement perspectives and should not be treated as interchangeable measures of the total public value of the library.

For municipal planning, the principal implication is the need to connect non-market valuation with dependable counts of visits and distinct users, transparent donation scenarios, and evidence on wider library benefits. This study contributes a paired-method example for a free city library, while its estimates remain conditional on the cross-sectional sample, model specifications, and aggregation conventions. Stronger administrative records and a more differentiated stated-preference experiment would improve the interpretability of future valuations.

REFERENCES

- Ahtiainen, H., Pouta, E., Zawadzki, W., & Tienhaara, A. (2023). Cost vector effects in discrete choice experiments with positive status quo costs. *Journal of Choice Modelling*, 47, 100401. <https://doi.org/10.1016/j.jocm.2023.100401>
- Antinori, C., Börger, T., King, P., & Peterson, M. (2026). Normal for whom? Exploring socioeconomic variation in a travel cost analysis of urban shoreline fishing. *Ecological Economics*, 241, 108872. <https://doi.org/10.1016/j.ecolecon.2025.108872>
- Ateca-Amestoy, V., Gorostiaga, A., & Rossi, M. (2020). Motivations and barriers to heritage engagement in Latin America: Tangible and intangible dimensions. *Journal of Cultural Economics*, 44(3), 397–423. <https://doi.org/10.1007/s10824-019-09366-z>
- Audunson, R., Aabø, S., Blomgren, R., Evjen, S., Jochumsen, H., Larsen, H., Rasmussen, C. H., Vårheim, A., Johnston, J., & Koizumi, M. (2019). Public libraries as an infrastructure for a

- sustainable public sphere: A comprehensive review of research. *Journal of Documentation*, 75(4), 773–790. <https://doi.org/10.1108/JD-10-2018-0157>
- Benedetto, G., Madau, F. A., Carzedda, M., Marangon, F., & Troiano, S. (2022). Social economic benefits of an underground heritage: Measuring willingness to pay for karst caves in Italy. *Geoheritage*, 14, Article 69. <https://doi.org/10.1007/s12371-022-00701-z>
- Bille, T. (2024). The values of cultural goods and cultural capital externalities: State of the art and future research prospects. *Journal of Cultural Economics*, 48(3), 347–365. <https://doi.org/10.1007/s10824-024-09503-3>
- Bille, T., & Noonan, D. (2026). From intuition to evidence: Measuring externalities from cultural human capital for better cultural-policy decisions. *Journal of Cultural Economics*, 50(3), 499–519. <https://doi.org/10.1007/s10824-026-09592-2>
- Blanchard, E., Fitzjohn, C., Ho, K. K., & McGivern, H. (2026). The impact and value of public libraries in the UK: A systematic review. *Journal of Librarianship and Information Science*. Advance online publication. <https://doi.org/10.1177/09610006261431330>
- Boyle, K. J., Bishop, R. C., & Welsh, M. P. (1985). Starting point bias in contingent valuation bidding games. *Land Economics*, 61(2), 188–194.
- Bukittinggi City Library and Archives Service. (2026). *Data on visits, visitor composition, and budget of the Bukittinggi City Regional Public Library for 2021–2025* [Unpublished data].
- Bukittinggi City Regional Finance Agency. (2025). *Library budget allocation data and the Bukittinggi City Regional Budget for 2021–2025* [Unpublished data].
- Carson, R. T., Flores, N. E., Martin, K. M., & Wright, J. L. (1996). Contingent valuation and revealed preference methodologies: Comparing the estimates for quasi-public goods. *Land Economics*, 72(1), 80–99.
- Cho, W., & Ho, A. T. K. (2026). An integrated valuation framework for estimating return on investment in public services: The case of public libraries in Kansas. *Journal of Policy Studies*, 41(2), 77–99. <https://doi.org/10.52372/JPS.260267>
- Clawson, M., & Knetsch, J. L. (1966). *Economics of outdoor recreation*. Johns Hopkins University Press.
- Czajkowski, M., Giergiczny, M., Kronenberg, J., & Englin, J. (2019). The individual travel cost method with consumer-specific values of travel time savings. *Environmental and Resource Economics*, 74(3), 961–984. <https://doi.org/10.1007/s10640-019-00355-6>
- De Leon, S. V. (2021). The social return on investment methodology as a tool for valuation and impact assessment for libraries: A case study. *Journal of the Australian Library and Information Association*, 70(2), 177–193. <https://doi.org/10.1080/24750158.2021.1895465>
- Drupp, M. A., Turk, Z. M., Groom, B., & Heckenhahn, J. (2025). Global evidence on the income elasticity of willingness to pay, relative price changes and public natural capital values. *Environmental and Resource Economics*, 88(12), 3765–3804. <https://doi.org/10.1007/s10640-025-01042-5>
- Du, J. T., Partridge, H., Howard, K., & Xie, Z. (2026). Public libraries and social capital: A scoping review. *Journal of the Australian Library and Information Association*, 75(2), 236–255. <https://doi.org/10.1080/24750158.2026.2630131>
- Dundas, S. J., & von Haefen, R. H. (2020). The effects of weather on recreational fishing demand and adaptation: Implications for a changing climate. *Journal of the Association of Environmental and Resource Economists*, 7(2), 209–242. <https://doi.org/10.1086/706343>
- Englin, J., & Shonkwiler, J. S. (1995). Estimating social welfare using count data models: An application to long-run recreation demand under conditions of endogenous stratification and truncation. *The Review of Economics and Statistics*, 77(1), 104–112.
- Espinosa-Casero, F., & Herrero-Prieto, L. C. (2026). Valuing cultural heritage through non-monetary scales: A comparison. *Journal of Cultural Economics*, 50(3), 631–661. <https://doi.org/10.1007/s10824-025-09560-2>
- Falk, J. H., Claudio, N., Myllykoski, M., Seppälä, S., Sivonen, P., & Tamminen, J. (2025). Towards a valid measure of the economic value of museum experiences: An example from Finland.

- Social Indicators Research*, 177(2), 533–556. <https://doi.org/10.1007/s11205-025-03518-9>
- Fantechi, T., Casini, L., & Scozzafava, G. (2026). Diving into ecosystem value: A travel cost assessment of shark-related tourism in the Mediterranean Sea. *Agricultural and Food Economics*, 14, Article 25. <https://doi.org/10.1186/s40100-026-00469-8>
- Ferreira Neto, A. B., Nowicki, J., & Shakya, S. (2025). Do public libraries help mitigate crime? Evidence from Kansas City, MO. *Journal of Cultural Economics*, 49(1), 141–161. <https://doi.org/10.1007/s10824-023-09497-4>
- Frey, U. J., & Pirscher, F. (2019). Distinguishing protest responses in contingent valuation: A conceptualization of motivations and attitudes behind them. *PLOS ONE*, 14(1), e0209872. <https://doi.org/10.1371/journal.pone.0209872>
- Fujiwara, D., Lawton, R. N., & Mourato, S. (2019). More than a good book: Contingent valuation of public library services in England. *Journal of Cultural Economics*, 43(4), 639–666. <https://doi.org/10.1007/s10824-019-09369-w>
- Ghermandi, A., Camacho-Valdez, V., & Trejo-Espinosa, H. (2020). Social media-based analysis of cultural ecosystem services and heritage tourism in a coastal region of Mexico. *Tourism Management*, 77, 104002. <https://doi.org/10.1016/j.tourman.2019.104002>
- Gilpin, G., & Becker, J. (2020). Households' public library use across the school calendar. *Library & Information Science Research*, 42(2), 101012. <https://doi.org/10.1016/j.lisr.2020.101012>
- Gilpin, G., Karger, E., & Nencka, P. (2024). The returns to public library investment. *American Economic Journal: Economic Policy*, 16(2), 78–109. <https://doi.org/10.1257/pol.20210300>
- Glenk, K., Meyerhoff, J., Akaichi, F., & Martin-Ortega, J. (2019). Revisiting cost vector effects in discrete choice experiments. *Resource and Energy Economics*, 57, 135–155. <https://doi.org/10.1016/j.reseneeco.2019.05.001>
- Gómez-Zapata, J. D., & del Barrio-Tellado, M. J. (2023). Social impact and return on investment from cultural heritage institutions: An application to public libraries in Colombia. *Journal of Cultural Heritage*, 64, 102–112. <https://doi.org/10.1016/j.culher.2023.09.004>
- Gómez-Zapata, J. D., Del Barrio-Tellado, M. J., Espinosa-Casero, F., & Herrero-Prieto, L. C. (2024). I like participatory museums but, how much? Embedding demand-side value in assessing strategies. *Socio-Economic Planning Sciences*, 96, 102111. <https://doi.org/10.1016/j.seps.2024.102111>
- Gómez-Zapata, J. D., Espinal-Monsalve, N. E., & Herrero-Prieto, L. C. (2018). Economic valuation of museums as public club goods: Why build loyalty in cultural heritage consumption? *Journal of Cultural Heritage*, 30, 190–198. <https://doi.org/10.1016/j.culher.2017.09.010>
- Gómez-Zapata, J. D., Herrera-Moreno, M. A., & Herrero-Prieto, L. C. (2025). Valuing cultural public goods in times of pandemic: What happened to the libraries? *Journal of Librarianship and Information Science*, 57(1), 21–39. <https://doi.org/10.1177/09610006231196345>
- Gonyo, S. B., Burkart, H., & Regan, S. (2024). Leveraging big data for outdoor recreation management: A case study from the York River in Virginia. *Journal of Environmental Management*, 354, 120482. <https://doi.org/10.1016/j.jenvman.2024.120482>
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, 26(3), 499–510.
- Ha, N. T. V., Chinh, T. C., Thuc, N. H., Tran, T. H., & Le, H. D. (2025). Valuation of the Trang An karst system using contingent valuation method and choice experiment. *Discover Sustainability*, 6, Article 1364. <https://doi.org/10.1007/s43621-025-02247-w>
- Haghani, M., Bliemer, M. C. J., Rose, J. M., Oppewal, H., & Lancsar, E. (2021). Hypothetical bias in stated choice experiments: Part I. Macro-scale analysis of literature and integrative synthesis of empirical evidence from applied economics, experimental psychology and neuroimaging. *Journal of Choice Modelling*, 41, 100309. <https://doi.org/10.1016/j.jocm.2021.100309>
- Halkos, G. E., Koundouri, P. C., Aslanidis, P.-S. C., & Plataniotis, A. (2024). Evaluating the tangible and intangible parameters of cultural heritage: An economic meta-analysis in a global

- context. *Discover Sustainability*, 5, Article 187. <https://doi.org/10.1007/s43621-024-00398-w>
- Handke, C., & Dalla Chiesa, C. (2022). The art of crowdfunding arts and innovation: The cultural economic perspective. *Journal of Cultural Economics*, 46, 249–284. <https://doi.org/10.1007/s10824-022-09444-9>
- Hanley, N., & Czajkowski, M. (2019). The role of stated preference valuation methods in understanding choices and informing policy. *Review of Environmental Economics and Policy*, 13(2), 248–266. <https://doi.org/10.1093/reep/rez005>
- Hwang, J. J. (2025). Willingness-to-pay for wetland restoration in Tampa Bay, Florida: Is it really about restoring wetlands? *Wetlands*, 45, Article 104. <https://doi.org/10.1007/s13157-025-01958-0>
- Igarashi, T., Koizumi, M., & Widdersheim, M. M. (2023). Overcoming social divisions with the public library. *Journal of Documentation*, 79(1), 52–65. <https://doi.org/10.1108/JD-12-2021-0244>
- Jamal, A., Joseph, M. K., & Vijesh, P. V. (2023). A public library as a gateway for social work community practice: An information-in-practice from Kerala, India. *Journal of the Australian Library and Information Association*, 72(4), 492–499. <https://doi.org/10.1080/24750158.2023.2271694>
- Johnston, R. J., Boyle, K. J., Adamowicz, W., Bennett, J., Brouwer, R., Cameron, T. A., Hanemann, W. M., Hanley, N., Ryan, M., Scarpa, R., Tourangeau, R., & Vossler, C. A. (2017). Contemporary guidance for stated preference studies. *Journal of the Association of Environmental and Resource Economists*, 4(2), 319–405. <https://doi.org/10.1086/691697>
- Juutinen, A., Immerzeel, B., Pouta, E., Lankia, T., Artell, J., Tolvanen, A., Ahtiainen, H., & Vermaat, J. (2022). A comparative analysis of the value of recreation in six contrasting Nordic landscapes using the travel cost method. *Journal of Outdoor Recreation and Tourism*, 39, 100528. <https://doi.org/10.1016/j.jort.2022.100528>
- Kim, H., & Pyo, S. H. (2026). A study on the application of economic valuation frameworks for public libraries in Korea. *Journal of Korean Library and Information Science Society*, 57(2), 153–182. <https://doi.org/10.16981/kliss.57.2.202606.153>
- Kwak, S. Y., & Yoo, S. H. (2012). The public value of a national library: Results of a contingent valuation survey. *Journal of Librarianship and Information Science*, 44(4), 263–271. <https://doi.org/10.1177/0961000612455820>
- Lloyd-Smith, P., Abbott, J. K., Adamowicz, W., & Willard, D. (2019). Decoupling the value of leisure time from labor market returns in travel cost models. *Journal of the Association of Environmental and Resource Economists*, 6(2), 215–242. <https://doi.org/10.1086/701760>
- Lupi, F., Phaneuf, D. J., & von Haefen, R. H. (2020). Best practices for implementing recreation demand models. *Review of Environmental Economics and Policy*, 14(2), 302–323. <https://doi.org/10.1093/reep/reaa007>
- McMenemy, D., Robinson, E., & Ruthven, I. (2023). The impact of COVID-19 lockdowns on public libraries in the UK: Findings from a national study. *Public Library Quarterly*, 42, 92–110. <https://doi.org/10.1080/01616846.2022.2058860>
- Mitchell, R. C., & Carson, R. T. (1989). *Using surveys to value public goods: The contingent valuation method*. Resources for the Future.
- Nguyen, T. P. (2025). Reimagining public space: A conceptual exploration of the Libraries After Dark program as civic infrastructure in the state of Victoria, Australia. *Public Library Quarterly*. Advance online publication. <https://doi.org/10.1080/01616846.2025.2542065>
- Noh, K.-K., & Song, G.-H. (2025). A study on developing tools for measuring the economic value of university library services. *Journal of Korean Library and Information Science Society*, 56(1), 79–102. <https://doi.org/10.16981/kliss.56.1.202503.79>
- Park, H., & Yoon, J. (2024). Willingness to pay for chronic disease management services provided by primary care nurses. *Human Resources for Health*, 22, Article 49. <https://doi.org/10.1186/s12960-024-00935-8>

- Penn, J., & Hu, W. (2019). Cheap talk efficacy under potential and actual hypothetical bias: A meta-analysis. *Journal of Environmental Economics and Management*, 96, 22–35. <https://doi.org/10.1016/j.jeem.2019.02.005>
- Pramono, A. Z., & Saptutyningsih, E. (2023). Assessing economic value of a cultural heritage site using travel cost method. *Journal of Economics Research and Social Sciences*, 7(1), 98–115. <https://doi.org/10.18196/jerss.v7i1.17660>
- Putri, M., & Irfan, M. (2023). Economic valuation of the Adityawarman Museum area in Padang City using the travel cost method. *Ecosains: Scientific Journal of Economics and Development*, 12(1), 1–11.
- Real, B., Balazs, S., Davis, A., & Oltmann, S. M. (2026). Return-on-investment in public libraries: A study from the state of Kentucky. *Public Library Quarterly*. Advance online publication. <https://doi.org/10.1080/01616846.2026.2711582>
- Samuelson, P. A. (1954). The pure theory of public expenditure. *The Review of Economics and Statistics*, 36(4), 387–389.
- Sinclair, M., Mayer, M., Woltering, M., & Ghermandi, A. (2020). Valuing nature-based recreation using a crowdsourced travel cost method: A comparison to onsite survey data and value transfer. *Ecosystem Services*, 45, 101165. <https://doi.org/10.1016/j.ecoser.2020.101165>
- Suarez-Fernandez, S., Prieto-Rodriguez, J., & Perez-Villadoniga, M. J. (2020). The changing role of education as we move from popular to highbrow culture. *Journal of Cultural Economics*, 44(2), 189–212. <https://doi.org/10.1007/s10824-019-09355-2>
- Takyi, S., Antwi, R. B., Ozguven, E. E., Alişan, O., Ghorbanzadeh, M., Mardis, M., & Jones, F. (2023). Measuring spatial accessibility of public libraries using floating catchment area methods: A comparative case study in Calhoun County, Florida. *Transportation Research Interdisciplinary Perspectives*, 22, 100944. <https://doi.org/10.1016/j.trip.2023.100944>
- Tan, T.-S., Chen, T.-L., & Yang, P. H. (2017). User satisfaction and loyalty in a public library setting. *Social Behavior and Personality*, 45(5), 741–756. <https://doi.org/10.2224/sbp.5999>
- Tefera, M. W., & Wassie, A. G. (2026). Estimating household preference and willingness to pay for urban recreational facilities using a choice experiment method. *Discover Sustainability*, 7, Article 1283. <https://doi.org/10.1007/s43621-026-03667-y>
- Tobin, J. (1958). Estimation of relationships for limited dependent variables. *Econometrica*, 26(1), 24–36.
- Torres-Ortega, S., Pérez-Álvarez, R., Díaz-Simal, P., de Luis-Ruiz, J. M., & Piña-García, F. (2018). Economic valuation of cultural heritage: Application of travel cost method to the National Museum and Research Center of Altamira. *Sustainability*, 10(7), 2550. <https://doi.org/10.3390/su10072550>
- Vossler, C. A., & Zawojka, E. (2020). Behavioral drivers or economic incentives? Toward a better understanding of elicitation effects in stated preference studies. *Journal of the Association of Environmental and Resource Economists*, 7(2), 279–303. <https://doi.org/10.1086/706645>
- Vårheim, A., Skare, R., & Lenstra, N. (2019). Examining libraries as public sphere institutions: Mapping questions, methods, theories, findings, and research gaps. *Library & Information Science Research*, 41(2), 93–101. <https://doi.org/10.1016/j.lisr.2019.04.001>
- Waring, T., & Longo, A. (2025). Implementing carbon capture and storage in the United Kingdom: Estimating willingness to pay through a contingent valuation survey. *Environmental Management*, 75, 1432–1443. <https://doi.org/10.1007/s00267-025-02174-6>
- Wiśniewska, A., Budziński, W., & Czajkowski, M. (2020). An economic valuation of access to cultural institutions: Museums, theatres, and cinemas. *Journal of Cultural Economics*, 44(4), 563–587. <https://doi.org/10.1007/s10824-020-09375-3>
- Wojciechowska, M., & Topolska, K. (2021). Social and cultural capital in public libraries and its impact on the organization of new forms of services and implementation of social projects. *Journal of Library Administration*, 61(6), 627–643. <https://doi.org/10.1080/01930826.2021.1947053>

- Wojciechowska, M. D. (2021). The role of public libraries in the development of social capital in local communities – a theoretical study. *Library Management*, 42(3), 184–196. <https://doi.org/10.1108/LM-10-2020-0139>
- Zawojka, E., Bartczak, A., & Czajkowski, M. (2019). Disentangling the effects of policy and payment consequentiality and risk attitudes on stated preferences. *Journal of Environmental Economics and Management*, 93, 63–84. <https://doi.org/10.1016/j.jeem.2018.11.007>