



TERRITORIAL FISCAL BALANCE OF THE DISTRICT OF NOSARA

Estimation of Fiscal Contribution and Revenue Potential vs. Public Investment Received

Technical Study on Territorial Public Finance

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EXECUTIVE SUMMARY

Nosara is one of the most economically dynamic territories in Costa Rica, yet it remains statistically invisible in the country's fiscal accounts. It is the district with the highest price per square meter in the country, receives high-spending international tourism, has a real estate market that moves hundreds of millions of dollars per year, and has doubled its housing stock in just five years. However, when we look for figures that should accompany such economic dynamism (official revenue data, executed public investment, or fiscal accounts at the district level) those territorial fiscal records simply do not exist. This study was developed to quantify that invisible fiscal reality.

This study estimates how much Nosara produces, how much it pays in taxes (or should pay), and how much it receives back in public investment, using internationally recognized methodologies and verifiable data from official sources. The result is the first territorial fiscal balance estimation ever conducted for a district in Costa Rica: the first rigorous examination of the relationship between what this district gives to the Costa Rican State and what the State gives back.

Study Objectives

- Estimate the volume of economic activity in the district of Nosara.
- Estimate the fiscal contribution of the district of Nosara to municipal finances through taxes collected via: construction permits, commercial licenses, and property tax.
- Estimate the fiscal contribution of the district of Nosara to central government finances through income tax and value-added tax (VAT) payments, as well as contributions to the Costa Rica Fire Department (Bomberos).
- Analyze public data on investment received from both the central government and the municipal government in Nosara.
- Analyze the district's potential revenue collection under the aforementioned taxes.
- Present a fiscal balance between the district's contributions and the public investment received, as well as the revenue collection opportunity window.

General Methodology

This study employs internationally recognized and widely applied methodology for estimating the volume of territorial district-level economic activity and its fiscal contribution generation. The methodology relies on the evaluation of proxies and indicator sensitivity according to the economic profile, information availability, official data, estimated data, and scenario application. Currently, within the accounting records of national tax systems, there is no classification of public expenditure and public revenue that allows data extraction by year and by district in order to obtain precise institutional statistical data on Nosara's fiscal balance as a district. Nevertheless, the necessary information components for this technical estimation exercise are available, and formal requests for tax information were submitted to the Municipality of Nicoya and the Ministry of Finance, the entities responsible for local and central government tax collection, respectively. It is important to clarify that not all currently collected tax revenue categories are included - only those with a relatively high significance within the overall revenue and public investment expenditure figures.

Revenue lines such as fines, concession fees, rents, and minor taxes that are part of the fiscal equation but lack statistical inputs and carry relatively low weight are therefore excluded from this technical study. It is recognized that worldwide, there has always been a challenge in generating territory-disaggregated statistical data for exercises such as GDP estimation, tax evasion assessment, revenue collection, and that in all cases limitations are encountered. In the case of Nosara, these circumstances are documented and the best combination of methodologies is implemented using the data available and provided by the relevant institutions.

Range of Economic Activity: How Much Does Nosara Produce?

The estimated Gross Domestic Product of the district is approximately USD 2.13 billion annually. This figure was obtained using electricity consumption as the primary proxy - a standard methodology worldwide - and was validated with three independent approximations: short-term accommodation revenue, construction activity adjusted for informality, and aggregate fiscal value of the real estate stock. The four methodologies converge within a range of USD 2.0 to 2.34 billion, with a dispersion of only 17%, which lends robustness to the exercise.

To put it in perspective: the economy of a single district of 135 km² with fewer than 9,000 permanent residents is equivalent to more than 2% of national GDP. And this in an economy where 6 out of 10 constructions are built without permits, 96.6% of short-term accommodations are not registered with the ICT platform, the mandatory cross-check mechanism with the Ministry of Finance for tax payment, and cadastral values have not been updated in eight years.

How Much Should It Contribute in National Taxes and How Much Does It Pay Municipally?

If current tax rates are applied to the identified economic base, the potential revenue from national taxes (income tax and VAT) amounts to approximately USD 209.6 million annually. At the municipal level, Nosara's estimated current contribution in property taxes, commercial licenses, construction permits, and community services is USD 4.1 million annually. To this, nearly USD 943 thousand paid to the Fire Department through the electricity bill must be added.

How Much Is Lost Along the Way?

The estimated fiscal gap is structurally significant. This study identifies at least USD 13.8 million annually in direct tax evasion: approximately USD 12.5 million at the national level, corresponding to the informality of short-term accommodations (only 51 out of 1,500 are registered with the ICT platform, the mandatory cross-check mechanism with the Ministry of Finance for tax payment) and to the solidarity tax on luxury homes; and USD 1.27 million at the municipal level, from informal construction fees, uncaptured property tax, and short-term rental licenses.

But the largest gap is a silent one: cadastral outdatedness. The fiscal values of the district's properties were set in 2017, and since then the market has surged. The analysis of 215 properties for sale shows that market prices exceed fiscal values by an average factor of 12 times. If the tax base reflected what properties are actually worth today, property tax revenue would increase from USD 2.67 million to USD 32.3 million annually. That gap of USD 29.6 million per year does not require changing any law or creating any new tax: it only requires effective tax collection.

Adding direct evasion and uncaptured potential revenue (including capital gains on real estate transactions), the total estimated fiscal gap exceeds USD 55 million annually.

How Much Does Nosara Receive Back?

From the central government, the average annual public investment in the district is estimated at USD 10.8 million. Nearly half goes to education (USD 5 million for 965 students) and one-fifth to healthcare (USD 2.3 million for two EBAIS shifts operating with structurally insufficient capacity for a population exceeding 35,000 during peak season). This represents 5% of the potential fiscal revenue warranted by its district-level GDP.

At the municipal level, the imbalance becomes even more evident. Between 2019 and 2024, the average annual municipal investment in Nosara was USD 605,752. Of that amount, USD 580,220 came from central government transfers for roads (Laws 8114 and 9329) and only USD 25,532 from the Municipality's own resources. In other words: Of the more than USD 4 million that Nosara generates annually in municipal taxes, only about USD 25,000 returns to the district. That is 0.6%.

Meanwhile, the Municipality allocates 34.7% of its disbursed budget to payroll and 21.4% to services. Investment in Nosara - the district that proportionally contributes the most to cantonal coffers - represented only 3% of the cumulative municipal budget over those six years.

What Explains This Imbalance?

Several things simultaneously. The country's fiscal centralization, which causes most taxes to be collected from San José with only a fraction returning to the territories. The informality of an economy where entire sectors operate outside the tax radar. The institutional lag of a cadastre that has gone eight years without updating while the market transforms at unprecedented speed. And, it must be said, the limited political weight of a district where just over half the permanent population is registered to vote and abstention rates are high.

What Can Be Done?

This report identifies a set of actionable policy measures. At the municipal level: update the cadastre (which alone would multiply property tax revenue), regularize licenses in the

accommodation sector, combat informal construction, and invest proportionally in the district that contributes the most. At the central level: generate territory-disaggregated fiscal statistics, implement cross-institutional controls, and allocate public investment proportional to the actual economic capacity of each territory. At the community level: exercise citizen participation in the formulation and oversight of municipal budgets, and seriously consider the creation of a Municipal District Council so that Nosara has autonomy in the collection, investment, and distribution of its municipal taxes.

Methodological Note

This is a structural estimation exercise. The results represent orders of magnitude for public policy analysis. They were constructed using data from ICE, CFIA, Ministry of Finance, Comptroller General of the Republic, ICT, Censo Nosara 2024, SICOP, SINIRUBE, World Bank, OECD, and other official sources. Methodological limitations are documented in detail in Section 7 of the report.

Nosara in a Nutshell

Imagine that Nosara could produce up to 1,000 mangoes per year. But of those 1,000, about 867 are lost before reaching the basket: they are stolen, they rot, they are hidden, or they are never picked.

Of the 133 mangoes that are actually harvested, the Municipality arrives, takes them all, and in the end returns approximately 1 mango to Nosara. The other 132 mangoes are consumed by Nicoya.

An even simpler version: of every 1,000 mangoes that Nosara could produce, only 133 are harvested, and of those 133, barely 1 remains for the district.

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This study integrates public finance, institutional analysis, and data intelligence to make visible what existing systems do not measure: the gaps between what a territory generates, what it pays in taxes, and what it receives back. It constitutes the first complete fiscal examination at the district level conducted in Costa Rica, integrating more than 13 independent institutional sources: ICE, CFIA, Comptroller General of the Republic, Ministry of Finance, ICT, ONT, CCSS, SICOP, National Registry, among others, through four convergent GDP estimation methodologies, with a dispersion of only 17%.

Completing this technical study on the Fiscal Balance of Nosara represents another community milestone: estimating for the first time the territorial fiscal balances and subnational GDP approximation of a district, combining cadastral gap analysis, tax evasion and informality assessment with the integration of dispersed sources to produce diagnostics that institutions do not generate on their own.

The challenge now lies with the community: to continue these efforts in demanding the territorial and budgetary changes that the population counted in the Censo Nosara and future generations deserve.

This study represents the first step toward achieving territorial fiscal transparency and fiscal justice for Nosara.

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INTRODUCTION

The district of Nosara, located in the canton of Nicoya in the province of Guanacaste, constitutes one of the most economically dynamic territories in Costa Rica. As cited by El Financiero in 2023, it is the district with the highest price per m² for properties for sale in the entire country. The local economy is based on three particularly relevant sectors: (i) real estate market and property transactions, (ii) formal and informal construction, and (iii) international tourism classified as luxury tourism. However, despite its economic importance, Costa Rica does not have publicly available statistics disaggregated at the district level that allow for the official and systematic quantification of local economic activity, generated tax revenue, or disbursed public investment. This information limitation prevents local governments and planning authorities from having clarity regarding the territorial fiscal balance: that is, the relationship between what the territory contributes to tax revenue, the potential revenue based on its economic output, tax evasion and avoidance gaps, and what it receives in public investment. This study constitutes, in its scope, a technical analysis tool that seeks to estimate, through internationally accepted methodologies and verifiable data, the territorial fiscal balance of the district of Nosara.

2. CONCEPTUAL FRAMEWORK

2.1 Definition of Territorial Fiscal Balance

It is the relationship between income generated economically within a territory and public expenditure carried out in that territory.

$$\text{Fiscal Balance} = \text{Generated Revenue} - \text{Public Investment Received}$$

2.2 Generated Revenue vs. Allocated Revenue

Generated: income whose economic origin resides in the territory of the district of Nosara (135 km²). Allocated: that which the central and municipal government deliberately invests in the district.

2.3 Fiscal Centralization in Costa Rica

Costa Rica is a state characterized by high fiscal centralization. The majority of taxes are collected nationally and only a fraction returns to the territories. This structure prevents territories from capturing the full economic value generated. There is no legislation requiring that taxes generated in territories be invested fully or proportionally in that same territory.

2.4 Measurement Limitations

Costa Rica does not publish fiscal data on economic activity disaggregated by district. Limitations: there is no district-level tax census. INEC publishes demographic data. The Ministry of Finance does not territorially disaggregate the national accounts.

2.5 Glossary of Technical Concepts

Below, technical concepts repeatedly used in this document are defined. This glossary is essential to ensure that readers correctly interpret the specialized terminology employed in the analysis.

Concept	Definition
GDP (Gross Domestic Product)	Total value of final goods and services produced in an economy during a specific period (usually one year). Measured at market prices. In this study, it is estimated using proxies due to the lack of official data disaggregated at the district level.
Proxy (Economic Proxy)	An observable variable used as a substitute for a variable of interest that is not directly measurable. In this case, electricity consumption acts as a proxy for GDP. The correlation between both variables is strong: larger economies consume more electricity.
VAT (Value-Added Tax)	Indirect tax levied on the value added at each stage of the production and distribution of goods and services. In Costa Rica, it is charged at a rate of 13% on most goods and services. Represents approximately 4.93% of GDP in revenue collection.
Income Tax	Direct tax levied on income earned by individuals (employees, professionals) and legal entities (companies). In Costa Rica, it includes labor, capital, and business income. Represents approximately 4.93% of GDP in revenue collection.
National Taxation	Taxes collected by the Central Government (Ministry of Finance) that are of national jurisdiction, including VAT, income tax, fuel taxes, and customs duties. Does not include municipal taxes.

Municipal Taxation	Taxes and fees collected by local governments (municipalities) that remain under their administrative control. In Costa Rica, these include: property tax, commercial licenses, construction fees, and service charges.
Property Tax	Annual municipal tax on property. Rate of 0.25% on the fiscal value of the property. It is the main source of municipalities' own tax revenue.
Construction Fee	Municipal fee equivalent to 1% of the declared value of construction works processed. It is paid at the time the construction permit is granted.
Commercial Licenses	Municipal tax levied on the practice of professions, commerce, and industry. The rate is 0.15% of the gross income declared by the business in the canton of Nicoya. It is an important source of municipal revenue in territories with intense commercial activity.
Community Services	Municipal fee paid for waste collection services, environmental sanitation, and other operational municipal services. It is not a tax but rather a service charge.
Potential Revenue	Amount of taxes that should theoretically be collected if tax rates were applied to the entire identified economic base. The difference between potential revenue and effective revenue collection indicates tax non-compliance (evasion and avoidance).

Tax Evasion	Deliberate non-compliance with tax obligations through concealment of income, false tax bases, or use of illicit mechanisms. In territories with informal economies, evasion can reach 30-70% of potential revenue.
Electricity Consumption	Amount of electrical energy consumed by households, businesses, and industries in a territory. Measured in kilowatt-hours (kWh). It is an indicator of economic activity because all activity requires energy.
GDP/kWh Ratio	A quotient expressing how many dollars of GDP each kilowatt-hour consumed in an economy generates. In Costa Rica, it is estimated at USD 7.49 per kWh at the national level. Allows projecting GDP from electricity consumption.
Tourism Intensity	Proportion of electricity consumption specifically attributable to tourism activities (hotels, restaurants, tours) relative to general residential and commercial consumption. Nosara has high tourism intensity: more than 1,500 short-term accommodations.
Fiscal Value (Homogeneous Zone Values)	Monetary value of a property determined administratively by the Ministry of Finance for tax purposes, excluding structures. It is used to levy property tax. It is usually lower than market value.
Construction Informality	Proportion of constructions carried out without obtaining an official permit from the

	CFIA (Federated College of Engineers and Architects). In Nosara, it is estimated at 60.5%, meaning that more than half of constructions are disbursed without formal registration.
Accommodation Revenue	Gross income reported by lodging establishments (hotels, Airbnb, Vrbo) for tourist overnight stays. Verifiable data from tourism platforms. Used as a proxy for tourism activity and GDP generation.
SICOP (Public Procurement System)	Digital platform of the Government of Costa Rica where all public procurement and investment projects are registered. Includes tenders, direct awards, and contracts. It allows tracking of disbursed public investment.
Public Investment	Expenditure by public sector institutions (Central Government, municipalities) on infrastructure construction, equipment acquisition, and capital improvements. Different from current expenditure (salaries, services).
CCSS (Costa Rican Social Security Fund)	Public institution that administers the health and social security system in Costa Rica. It executes investment in health centers, EBAIS (Basic Comprehensive Health Care Teams), and preventive health programs.
MEP (Ministry of Public Education)	State institution responsible for public education in Costa Rica. It executes budget in schools and high schools, teacher salaries,

	and educational infrastructure and pedagogical programs.
MOPT (Ministry of Public Works and Transportation)	State institution responsible for road infrastructure (highways, bridges) and transportation. It executes road network improvement and maintenance projects.
AyA (Water and Sewerage Utility)	Public institute responsible for drinking water and sewerage systems. It executes water infrastructure and sanitation projects.
Indicator Sensitivity	Capacity of an indicator to respond or vary in relation to changes in the variable being measured. In this context, how much GDP changes with changes in electricity consumption.
Estimation Scenarios	Different assumptions used to project results. This study uses: conservative scenario (low estimates), medium (main references), optimistic (high estimates). Allows evaluating the range of uncertainty.
Positive Fiscal Balance (Territorial Fiscal Deficit)	When generated revenue > public investment received. The territory is a 'net contributor.' Indicates that the territory contributes more to the national treasury than it receives as investment.
Negative Fiscal Balance (Territorial Fiscal Surplus)	When public investment received > generated revenue. The territory is a 'net recipient.' Indicates fiscal redistribution in favor of the territory.
Tax base	The value or amount on which a tax rate is applied to determine the tax payable. In the context of real estate, it is the fiscal value of

	the property determined by the ONT. In the context of income tax, it is the net taxable income. An outdated or under-declared tax base directly reduces effective revenue collection regardless of the rate applied.
Estimated fiscal gap by component	Quantification of the distance between current effective tax revenue and possible revenue, disaggregated by the specific mechanisms that generate that difference: active sectoral informality, undeclared construction, and outdated cadastral base. Unlike the structural potential fiscal contribution (→ distance to theoretical revenue), it constitutes a diagnosis of fiscal leakage by mechanism, not an aggregate capacity estimate. Components are classified as estimated evasion - where unfulfilled tax obligations exist - and potential revenue uncaptured due to institutional lag. See Section 6.3.
Fiscal centralization	A characteristic of the Costa Rican tax system whereby the majority of taxes (VAT, income tax, fuel, customs) are collected by the Central Government through the Ministry of Finance, and only a fraction of that revenue returns to the territories through transfers. Local governments administer only municipal taxes (property tax, licenses, construction fees), which represent a smaller fraction of the economic activity generated in the territory.

Structural potential fiscal contribution	Estimation of the revenue that the tax system should generate on the registered and observable tax base of the district: current cadastral fiscal values, constructions declared to the CFIA, and identified market inventory. It starts from the tax base toward theoretical revenue (tax base → theoretical revenue) and represents a measure of the district's fiscal capacity under current legal parameters, without adjustments for informality or value updates. See Section 6.1.
Tax domicile	The place where an individual or legal entity is registered with the tax administration for tax declaration and payment purposes. In territories with a high presence of foreign companies or hotel chains, the tax domicile may be in another province or canton (typically San José), which means that taxes generated by economic activity in the territory are declared and accounted for in another jurisdiction. This phenomenon contributes to underestimating the revenue attributable to the district.
Tax avoidance	Reduction of the tax burden through exploitation of gaps, ambiguities, or preferential treatments in legislation, without engaging in explicitly illegal conduct. Unlike evasion, avoidance operates within the current legal framework. In the context of Nosara, it may manifest as under-declaration of construction values,

	structuring of rental activities under corporate entities with tax benefits, or use of jurisdictions with favorable tax treaties.
Capital gain	Increase in the value of an asset between the time of its acquisition and the time of its sale. In the real estate market, it is the difference between the purchase price and the selling price of a property. In Costa Rica, capital gains on real estate are taxed at a rate of 15% on the net gain (Law 9635). The lack of cross-referencing between the National Registry and the General Directorate of Taxation makes it difficult to control its effective declaration.
Solidarity Tax (Luxury Homes)	National tax levied on the ownership of properties designated for residential, recreational, or mixed use whose construction and fixture value exceeds the annually established threshold. For the 2025-2027 period, the threshold is ₡145,000,000 (approximately USD 308,500). Rates are progressive between 0.25% and 0.55% according to value brackets. The declaration is triennial. It does not include the land value in the calculation base. Regulated by Decree No. 44834-H.
Market real estate inventory	A set of properties in active sale supply identified through direct consultation with real estate agencies operating in the district. For this study, 591 properties were identified across 13 real estate agencies, with a

	combined value of USD 778,947,158. It constitutes a primary source for estimating market value by zone and sector, used to calculate cadastral base update ratios and estimate the Property Tax gap. It does not represent the total universe of properties in the district.
ONT (Technical Standardization Body)	A dependency of the Ministry of Finance responsible for establishing the fiscal values of properties for Property Tax purposes, through the development of homogeneous zone maps and unit values for land and construction. Its values serve as the tax base for the property tax and must be updated periodically. The last value update for the District of Nosara dates from 2017; the update carried out in 2025 had not been published in the Official Gazette at the time of this study.
Effective Revenue Collection	Amount of taxes effectively received by the State or municipality coffers during a given period, according to official accounting records. It is the observable counterpart of potential revenue. The difference between potential revenue and effective revenue collection reflects total tax non-compliance, which may originate from active evasion, avoidance, structural informality, or outdated tax base.

3. METHODOLOGY

3.1 Economic Base Estimation: How Much Does Nosara Produce?

3.1.1 Electricity as a Proxy

Electricity consumption is correlated with economic activity. Electrical energy is necessary as a driver of economic development. An economy grows at a rate similar to the trend of electricity consumption and therefore has been the most widely used indicator to approximate, estimate, or predict the GDP of a country, territory, or region.

The Gross Domestic Product of the district of Nosara represents a fundamental economic estimation base for analyzing the correlation between a territory's economic activity and tax accounts, as well as indicators such as tax evasion and avoidance.

$$\text{Nosara District GDP} = \text{Electricity Consumption} \times \text{National GDP/kWh Ratio}$$

This is equivalent to the annual economic flow, or what Nosara produces in net terms annually and from which other variables of economic, tax, and financial analysis are derived, to analyze the district's economy and its fiscal finances. For this reason, this becomes the starting point for this technical study

3.1.2 National GDP/kWh Ratio

According to World Bank data for Costa Rica, the national Gross Domestic Product in 2024 reached USD 95.35 billion.

Additionally, regarding electricity, per capita consumption in 2024 reached 2,480 kWh according to Low Carbon Power data for Costa Rica.

On the other hand, Costa Rica's population stood at 5.13 million people in 2024, according to the World Bank. This same organization reports that GDP per capita in Costa Rica during that year was USD 18,587.2.

These data then indicate that electricity consumption in Costa Rica for 2024 was approximately 12.72 billion kWh per year; ≈ 12.7 TWh (terawatt-hours).

$$\text{GDP/kWh} = \text{USD } 95,350\text{M} / 12,720 \text{ M kWh} = \text{USD } 7.49 \text{ per kWh}$$

3.1.3 Nosara Data

Due to the growth that Nosara has experienced in recent years, the intensive tourism and construction activity, as well as homes equipped with high-energy-consumption appliances, this has resulted in a sustained increase in electrical energy in the district. This is a signal of the growing economy, economic development from investments and commercial dynamics, as well as the expansion of the residential tourism model (homes used for non-traditional tourist accommodation purposes).

Below, the 2025 monthly electricity consumption of the district of Nosara is shown, as provided by the Costa Rican Electricity Institute:

Electricity Consumption - District of Nosara (2025)

January:	24,275,415 kWh
February:	26,136,785 kWh
March:	24,572,035 kWh
April:	29,205,645 kWh
May:	26,078,065 kWh
June:	23,091,200 kWh
July:	21,744,495 kWh
August:	23,678,705 kWh
September:	21,403,205 kWh
October:	19,444,905 kWh
November:	20,597,385 kWh
December:	23,591,810 kWh
Total consumption:	283,819,650 kWh

Additionally, complementary statistical information exists to analyze the district's fiscal and economic outlook:

- According to Censo Nosara 2024 data, the permanent population residing in Nosara was 8,716 in 2024. Adding the temporary population (26,650 people), a total of 35,366 people would inhabit the district during December 2024.
- The per capita electricity consumption of the permanent population therefore represents 32,563 kWh/inhabitant/year.

This allows approximation using GDP per capita and GDP based on electricity consumption.

3.1.4 Complementary Approach: Short-Term Accommodation Revenue

Another methodology applied in the district GDP approximation exercise is based on the annual revenue of a key sector: in this case, short-term rentals. In this process, the following data is available:

- Annual revenue from short-term accommodations listed on Airbnb and Vrbo: 51.9 million dollars in 2025 (exchange rate 470). There are more than 1,500 accommodations concentrated in the district, with a lower number of active accommodations at the close of December 2025.
- Contribution of accommodations to district GDP. The proxy for the structural base is 2.6%, equivalent to the contribution this service has in Iceland, 2024, a territory where the tourism sector also has a relatively important share and where accommodation service data and its share in the overall tourism sector are disaggregated. These data come from the official statistics page of the European country: <https://www.statice.is/publications/news-archive/national-accounts/tourism-satellite-accounts-2024/>

Short-term accommodation revenue is not equal to the sector's value added; however, the data is representative of the entire sector: 1,500 accommodations, while hotels do not provide revenue data in available databases. However, these inputs allow an approximation of the district's GDP based on annual short-term accommodation revenue.

3.1.5 Complementary Approach: Construction Adjusted by Square Meters

A third approach is based on the construction sector, an activity with significant development in the district of Nosara as reflected in available data from the Federated College of Engineers and Architects (CFIA).

According to this entity, in Costa Rica 10,441,884 m² of construction permit was filed in 2024, while the construction sector contributed 11.4% to national GDP in 2024, a figure reported in the media outlet Delfino: <https://delfino.cr/2025/05/sector-construccion-y-actividades-inmobiliarias-contribuyen-con-48-billones-de-colones-anuales-al-pib-y-mas-de-489-mil-empleos-en-costa-rica>

This allows calculating that the contribution per square meter to national GDP was 1,040 USD/m² filed.

Additionally, the following inputs are available:

- According to CFIA, 99,371 m² of construction were filed in Nosara in 2024, but the same entity mentions that 4 out of 10 construction projects in the canton of Nicoya were carried out without a construction permit.
- According to the cartography of the district of Nosara, from 2019 to 2024 there was an increase of 2,860 housing points resulting in 6,270 at the cut-off of the Censo Nosara post-census cartography. In the same period between 2019 and 2024, the Municipality of Nicoya reported a total of 1,131 construction permits granted. Not every new housing point represents a new home, nor does every construction permit represent a new house (there are remodels, for example), but this is a sufficient basis to estimate the district's construction informality. Based on this data, informality is 60.5% versus 39.5% formality in construction (6 out of 10 works did not process a permit in that period).
- The adjusted base of square meters of construction probably built with that 60.5% informality rate becomes a total of 251,572 m² for the analysis year of 2024.

With this data, the study allows estimating the district's GDP approximation by adjusting the square meters filed to include those not filed but possibly built, considering the sector's informality estimate.

3.1.6 Gross Domestic Product Approximations for Nosara

Model	Driver/Proxy	Multiplier	Approximate GDP
Electricity consumption	USD 7.49 per kWh	283,819,650 kWh	2,125,809,178.50 (≈ 2.13B)
GDP Per capita	USD 18,587.2 per capita	35,366 people	657,354,915.20 (≈ 657.4M)
Short-Term Accommodation Revenue	2.6% of district GDP ratio	51.9 M dollars in 2024	1,996,153,846.15 (≈ 2.00B)
Adjusted construction m ²	Construction GDP in Nosara in 2024: 1,040 USD/m ² of construction permit National relative weight: 11.4%	251,572 m ² of estimated construction	2,295,042,807.02 (≈ 2.30B)
Additional reference:			
Fiscal value from Ministry of Finance homogeneous zone values, Costa Rica, 2017	Nearly 1:1 ratio between GDP estimated by previous methodologies	-	2,335 million dollars

In real estate capital-intensive economies, the added value of the real estate stock typically falls within an approximate range of 1 to 2 times annual GDP. In this case, the aggregate fiscal value of the district (≈ USD 2.34B) falls within that range relative to the district GDP estimate (USD 2.13B), which reinforces the structural coherence of the economic scale estimate. The

fiscal values are outdated (nearly 9 years) in a period when property prices have risen notably in the market prices offered, and these fiscal values include only the value of the land, not that of the constructions. This is a parallel reference, and this study will estimate a fiscal correction.

As reported by the Ministry of Finance of Costa Rica in response to inquiries made for this study, a new fiscal adjustment to the homogeneous zone values was carried out in 2025 and is pending publication in the Official Gazette (La Gaceta) by the Municipality of Nicoya, with no confirmation yet of when it will be done.

As an additional note, the estimation of district GDP using national GDP per capita (USD 18,587.2) yields a significantly lower value ($\approx$ USD 657 million) compared to the approximations obtained through electricity consumption, short-term accommodation, and construction proxies (USD 2.0-2.3 billion).

This divergence is methodologically expected. National GDP per capita reflects the average productivity and income generated across the entire Costa Rican territory, which includes rural and agricultural economies, areas of lower dynamism, and regions with economic structures very different from Nosara's.

In contrast, the analyzed district presents distinct structural characteristics:

- High concentration of international tourism activity.
- Strong dependence on the real estate sector and property income.
- Significant presence of foreign population and capital.
- High land appreciation.
- Economic activities linked to high-value services per territorial unit.

In territories with these characteristics, the income generated per territorial unit can significantly exceed the national average per inhabitant, especially when there is a gap between the resident population and the volume of economic activity induced by temporary visitors and external capital. Therefore, the direct extrapolation of national GDP per capita to

a district with disproportionate tourism intensity and real estate appreciation structurally underestimates the territory's actual economic activity.

Based on the approximations performed, this study uses as its calculation base the approximate GDP derived from electricity consumption for the district of Nosara, as it falls within the range of two other independent applicable methodology approximations for the district and whose reference relationship also coincides with a fourth methodology (fiscal value), and is supported by direct and verifiable data from the Costa Rican Electricity Institute.

3.1.6.1 Explicit Calculations - Calculation Records

Calculation of National GDP/kWh Ratio

To establish the national GDP/kWh ratio, macroeconomic reference data from 2024 obtained from official sources (World Bank, INEC, Central Bank of Costa Rica) are used:

Component	Value 2024
National GDP	USD 95,350 million
National Electricity Consumption	12,720 million kWh
Costa Rica Population	5.13 million inhabitants
National GDP Per Capita	USD 18,587.20

STEP 1:

Calculation of National Electricity Consumption

National Consumption = Per Capita Consumption × Population
 National Consumption = 2,480 kWh/inhab × 5,130,000 inhabitants
 National Consumption = 12,722,400,000 kWh ≈ 12.72 billion kWh

STEP 2:

Calculation of National GDP/kWh Ratio Formula: $\text{GDP/kWh} = \text{National GDP} \div \text{National Electricity Consumption}$
 Detailed Calculation: $\text{GDP/kWh} = \text{USD } 95,350,000,000 \div$

12,720,000,000 kWh GDP/kWh = USD 7.49 per kWh Result: USD 7.49 per kWh

Methodological Note: This value of USD 7.49 per kWh represents the national average and is the multiplier to be applied to the electricity consumption of the district of Nosara to estimate its approximate GDP. The validity of this approach rests on the premise that economic productivity per unit of energy is relatively homogeneous at the national level.

Calculation of District GDP by Electricity Consumption

Based on the national GDP/kWh ratio calculated above (USD 7.49), the GDP of the district of Nosara is estimated from its actual electricity consumption in 2025:

Calculation data:

- Annual Electricity Consumption of the District of Nosara (2025):
- Annual total reported by ICE: 283,819,650 kWh
- Monthly average: 23,651,637 kWh/month
- National GDP/kWh Ratio: USD 7.49 per kWh

STEP 1:

Formula Application Formula: $\text{Nosara GDP} = \text{Electricity Consumption} \times \text{GDP/kWh}$

Ratio Calculation: $\text{Nosara GDP} = 283,819,650 \text{ kWh} \times \text{USD } 7.49/\text{kWh}$

Nosara GDP = USD 2,125,809,178.50

Result: Approximate GDP = USD 2,125,809,178.50

In rounded figures: USD 2.13 billion

Note: This result of USD 2.13 billion represents the central estimate of district GDP. Given the variability in assumptions (tourism intensity, energy efficiency), alternative scenarios are presented ranging from USD 1.96 billion (conservative) to USD 2.30 billion (optimistic).

3.1.6.2 Comparative Analysis: Cross-Validation of Methodologies

The following analysis presents the four independent methodologies applied to estimate district GDP, demonstrating consistency in the range of estimates and robustness of results:

Methodology	Proxy/Driver	Calculation Base	GDP
Electricity Consumption	USD 7.49/kWh	283.82M kWh	USD 2,125.8M (2.13B)
Accommodation Revenue	2.6% of GDP	USD 51.9M	USD 1,996.2M (2.00B)
Adjusted Construction	USD 1,040/m ²	251,572 m ²	USD 2,295.0M (2.30B)
Fiscal Value of Properties	Ministry of Finance Homogeneous Zone Values, 2017	-	USD 2,335.9M (2.34B)
Per Capita GDP (ref) applied to Nosara	USD 18,587/hab	35,366 people	USD 657.4M (reference)

Analysis of Cross-Methodology Comparison: Estimation range: USD 2.00B - 2.34B

The four main methodologies (electricity, revenue, construction, fiscal value) converge in a very close range, with a dispersion of only 17% between the lowest estimate (USD 2.00B) and the highest (USD 2.34B). This convergence constitutes relevant methodological evidence. The main estimate from electricity consumption (USD 2.13B) is positioned at the midpoint of the range and supported by direct, verifiable data from the Costa Rican Electricity Institute. The GDP per capita approach yields a significantly lower value. This divergence is methodologically expected and does not invalidate the other estimates.

For these previous reasons, the GDP per capita base is not considered in the analysis exercises. Selection of the base approximation as study input:

The USD 2.13 billion line (electricity consumption) will be used as the main reference because it falls within the convergence range, has cross-validation from three independent methodologies, maintains a coherent 1:1 relationship with real estate fiscal value, and is a standard methodology in territorial public finance analysis.

3.1.6.3 Applied Calculations:

Electricity as Proxy

The national GDP/kWh ratio is used as a multiplier to estimate district GDP based on annual electricity consumption.

National GDP/kWh Ratio

national GDP 2024: USD 95,350,000,000

National electricity consumption 2024: 12,720,000,000 kWh

$$PIB/kWh = \frac{95,350,000,000}{12,720,000,000}$$

$$PIB/kWh = 7.49 \text{ USD/kWh}$$

Annual electricity consumption of the district of Nosara (2025)

Monthly sum reported by ICE:

283,819,650 *kWh*

District GDP estimation with electricity proxy

$$PIB_{Nosara} = 283,819,650 \times 7.49$$

$$PIB_{Nosara} = 2,125,809,178.50 \text{ USD}$$

Result:~ USD 2.13 billion

Approximation via GDP per capita

Costa Rican GDP per capita 2024: USD 18,587.2

Permanent population + temporal population:35,366 people

$$PIB_{Nosara} = 18,587.2 \times 35,366$$

$$PIB_{Nosara} = 657,354,915.20 \text{ USD}$$

Result:~ USD 657.4 million

(This value is considered a lower conservative estimate given the structural difference between the average national economy and the demographic composition and tourism-intensive economy of the district).

Approximation via short-term accommodation revenue

Annual revenue (Airbnb + Vrbo) during 2025: USD 51.9 million

It is assumed that this activity represents 2.6% of district GDP (structural reference equivalent to tourism-intensive economies).

$$PIB_{Nosara} = \frac{51.9 \text{ millones}}{0.026}$$

$$PIB_{Nosara} = 1,996,153,846.15 \text{ USD}$$

Result: ≈ USD 2.00 billion

Approximation via adjusted square meter construction

Step 1: Estimation of actual m² constructed

m² filed (CFIA): 99,371 m²

Formal construction: 39.5%

Estimated construction without permits: 60.5%

$$m_{total}^2 = \frac{99,371}{0.395}$$

$$m_{total}^2 = 251,572 \text{ m}^2$$

Step 2: Construction sector GDP (national base per m²)

National average contribution: USD 1,040 per m²

$$PIB_{Construcción} = 251,572 \times 1,040$$

$$PIB_{Construcción} = 261,634,880 \text{ USD}$$

This value represents the construction sector GDP of the district.

Step 3: Expansion to Total District GDP

Construction represents 11.4% of national GDP.

$$PIB_{Total} = \frac{261,634,880}{0.114}$$

$$PIB_{Total} = 2,295,042,807.02 \text{ USD}$$

Result: ≈ USD 2.30 billion

Fiscal Value based on data from Ministry of Finance

Total fiscal value (homogeneous zone values MH, 2017): ₡ 1,097,897,540,000

Exchange rate: ₡ 470 / USD

$$\begin{aligned} & \frac{1,097,897,540,000}{470} \\ & = 2,335,952,213 \text{ USD} \end{aligned}$$

Result:≈ USD 2.34 billion

This value (2017 base real estate stock) falls within the same order of magnitude as the district GDP estimates obtained through electricity, tourism, and construction (USD 2.0-2.3B), which reinforces the structural coherence of the district's economic scale.

3.2 Tax Estimation

3.2.1 National Tax Structure 2024

According to Costa Rica's national accounts tax data, in 2024 the country recorded the lowest fiscal revenue performance for the 2021-2024 period, according to a report by the Economic and Social Observatory (OES) of the School of Economics at the National University of Costa Rica. Total revenue from the Central Government amounted to 15.07% of GDP. That year, tax revenue fell to 13.39% of GDP. The most significant drop was concentrated in the Income Tax, which fell to 4.93% of GDP, below the 5% threshold. That means an interannual contraction of 0.36 percentage points relative to 2023. Although VAT showed a slight recovery (4.93% of GDP), driven by greater customs dynamism and growth in imports, this rebound did not offset the decline in income tax. This was published by the outlet La República on April 11, 2025, and the following data can be seen. Both taxes are the most important in revenue collection, and these national proportions are used to estimate the potential centralized fiscal contribution of Nosara on its estimated economic base.

Central Government revenue structure (% of GDP)

Item	2021	2022	2023	2024
Total revenue	15,67%	16,37%	15,25%	15,07%
Tax Income	13,80%	14,09%	13,65%	13,39%

Item	2021	2022	2023	2024
Income and Profit Tax (Income Tax)	5,12%	5,43%	5,29%	4,93%
Import Taxes	0,45%	0,38%	0,36%	0,38%
Export Taxes	0,02%	0,01%	0,01%	0,01%
Total VAT	5,06%	4,89%	4,86%	4,93%
Consumption Tax	0,53%	0,48%	0,58%	0,65%
Other tax revenue	2,62%	2,49%	2,55%	2,48%
Social contributions	1,16%	1,15%	1,18%	1,20%
Other income	0,38%	0,61%	0,34%	0,37%
Transfers	0,33%	0,52%	0,08%	0,11%

Sources:

1. Observatorio Económico y Social (OES), Escuela de Economía, Universidad Nacional de Costa Rica. Fiscal Report 2024.
2. La República. “2024 Recorded the Worst Fiscal Revenue Performance in the Last Three Periods.” Esteban Arrieta, April 11, 2025.
3. Ministry of Finance of Costa Rica - Fiscal statistics and budget settlement of the Central Government 2021-2024.

Based on these data, the national relationship between the most important taxes for this technical fiscal study is as follows:

- Value-Added Tax (VAT): 4.93% of GDP

- Income Tax: 4.93% of GDP
- Tax for the Costa Rican Fire Department: 1,75 % of electricity consumption (charged by the electrical bill; Costa Rican Institute of Electricity for Nosara).

Based on these data, it is then possible to determine the potential fiscal revenue for the most important centralized taxes that the district of Nosara should generate. In these data, it should also be added that the Ministry of Finance of Costa Rica estimates that tax non-compliance amounts to 5.7% of GDP. In the case of Nosara, being an economy with high informality, the percentage of tax non-compliance is likely higher and will also be approximated as part of this study further on.

Below, the calculations of the fiscal contribution that the district would generate are presented:

3.2.2 Estimated Centralized Fiscal Contribution Calculations

- Value-Added Tax: $2.13 \text{ B} \times 4.93\% = \text{USD } 104,802,393.50 \text{ USD}$
- Income Tax: $2.13 \text{ B} \times 4.93\% = \text{USD } 104,802,393.50 \text{ USD}$
- Total: 209,604,787.00 USD (209 million dollars) for Costa Rica Central Government national accounts

Tax for the Costa Rican Fire Department:

According to ICE electricity consumption data for 2025, the annual amount was 283,819,650 kWh; the residential off-peak rate is 89.19 colones per kWh, resulting in a billing amount of 53.9 million dollars annually. The fire department levy of 1.75% applied to the electricity billing generates an estimated contribution to Bomberos de Costa Rica of approximately USD 942,649 per year.

Calculation Details:

Data base

Annual electricity consumption (Nosara 2025): 283.819.650 kWh

Hourly residential rate - Off-peak period (ICE): ₡89.19 per kWh

Exchange rate used: ₡470 per USD 1

Levy for the Costa Rica Fire Department: 1,75 %

Conversion of the electricity tariff into US dollars

The tariff in colones is converted to US dollars using the defined exchange rate:

$$\begin{aligned} \text{Tarifa (USD/kWh)} &= \frac{89.19}{470} \\ &= 0,18976 \text{ USD/kWh} \end{aligned}$$

Rate used: USD 0.19 per kWh (approx.)

Estimation of annual electricity expenditure in Nosara

$$\begin{aligned} \text{Gasto anual} &= 283.819.650 \text{ kWh} \times 0,18976 \text{ USD/kWh} \\ &= 53.865.694 \text{ USD} \end{aligned}$$

Estimated annual electricity expenditure: ≈ USD 53.9 million

Calculation of the 1.75% tax for the Costa Rica Fire Department during 2025:

$$\begin{aligned} \text{Tax} &= 53,865,694 \times 0,0175 \\ \text{Tax} &= \mathbf{942,649.65 \text{ USD}} \end{aligned}$$

This represents nearly 1 million dollars in funds paid through Nosara users' electricity consumption that go to the Costa Rica Fire Department, a national entity that does not have an operating base in the district of Nosara.

3.2.3 Municipal Tax Components

Property Tax:

In order to estimate a minimum and technical base for the Property Tax (0.25%) revenue potential, this study initially proposes a very conservative structural approximation

construction using only official available information, without applying adjustments for market appreciation or construction informality.

The estimation is based on the following inputs:

- Aggregate fiscal value of district land (Ministry of Finance homogeneous zone values, 2017).
- Officially declared value in construction filings between 2019 and 2025 before the CFIA.

This method aims to establish a minimum structural floor for the district's real estate base as of 2025, incorporating formally declared new constructions, but excluding:

- Adjustments for market appreciation.
- Projects without construction permit.
- Post-2017 land revaluation.
- Pending fiscal value updates.

Therefore, the result constitutes a conservative estimate.

To estimate the property tax amount, it is necessary to calculate the fiscal value of the district's properties. This always has a base from the values dictated by the Ministry of Finance through the homogeneous zone values per canton zone. These values are outdated (the last update dates from 2017) and furthermore, they do not contemplate the value of constructions or market prices, which have varied enormously from 2017 to 2026, the year of this study.

Based on available information from the Ministry of Finance:

Estimation of Land Fiscal Value - District of Nosara (502-06)
Canton 02 Nicoya, Province 5 Guanacaste | Total area: 135 km² | ONT table

Concept	Value
Total area of the district	135,00 km ²
Small property - Area	20,07 km ²

Concept	Value
Large properties - Area	114,93 km ²
% surface in small properties	14,9%
Large properties - Fiscal Value	€312 059 740 000
Small properties - Fiscal Value	€785 837 800 000
Total estimated fiscal value	€1 097 897 540 000
Average value per m ²	€8 133

Fiscal Value Distribution		
Category	€	% of total value
Large properties	€312 059 740 000	28,4%
Small properties	€785 837 800 000	71,6%
Total	€1 097 897 540 000	100%

Although only 14.9% of the territory corresponds to small lots, these concentrate more than 70% of the total fiscal value, which reflects high value concentration in subdivided and higher-density zones.

Weighted average land value	
Lot type	€average / m ²
Large properties	€2 715
Small properties	€39 148

Lot type	Coverage / m ²
Average	Ø8 133

Methodological Note

- Unit values according to ONT 2017 Homogeneous Zone Map.
- Areas estimated through geospatial analysis calibrated to 135 km² (±15-20%).
- Differentiation between large and small lots based on:
 - Density Censo Nosara 2024
 - Cadastral verification SNIT
 - Validated local adjustments
- Does not include constructions.
- 2017 base values (not updated for inflation or market revaluation).
- New updated 2025 values have not yet been published by the Municipality of Nicoya.

The total fiscal value of the land in 2017 was ₡1,097,897,540,000, equivalent to approximately USD 2,335,952,213 using an exchange rate of ₡470 per dollar. This is the minimum base for property tax revenue calculations.

Additionally, the declared value of constructions filed with the Colegio Federado de Ingenieros y Arquitectos between 2019 and 2025 amounts to ₡166,533,971,459, equivalent to USD 354,327,599 using the same exchange rate.

The minimum structural real estate base estimated for the district as of 2025 is therefore:

USD 2,335,952,213 (lot base according to homogeneous zone values)

USD 354,327,599 (construction values filed with CFIA) = USD 2,690,279,812 (conservative base value for setting property tax rate)

On this minimum basis, the current legal Property Tax rate of 0.25% is applied.

The estimated minimum structural potential revenue is:

USD 2,690,279,812 × 0.0025 = USD 6,725,700 (approx.) annually

Consequently, the estimated minimum structural floor for annual Property Tax revenue in the district of Nosara amounts to approximately USD 6.7 million annually.

This amount does not contemplate adjustments for real estate appreciation, construction informality, undeclared new buildings, or cadastral updates after 2017, so it should be understood as a conservative minimum estimate. Furthermore, it does not assume an adjustment for possible under-declaration of construction values, which is common in real estate markets with high informality. The minimum structural real estate base estimated for the district as of 2025 is therefore the sum of the district's aggregate fiscal land value plus construction values filed with the CFIA.

Calculation

Fiscal value (only the land) (2017):

The calculations of the tax base and the potential property tax are detailed below:

$$₡ 1,097,897,540,000 \div 470 = \text{USD } 2,335,952,213$$

Declared construction value 2019-2025:

$$₡ 166,533,971,459 \div 470 = \text{USD } 354,327,599$$

Minimum structural real estate base 2025:

$$2,335,952,213 + 354,327,599 = \text{USD } 2,690,279,812$$

Property Tax (0.25%):

$$2,690,279,812 \times 0.0025 = \text{USD } 6,725,700$$

Furthermore, upon conducting an analysis of 13 real estate agencies on their public web pages, an inventory of 591 properties for sale in the district was identified, with a combined value of USD 778,947,158 (778.9 million dollars). This amount from a portion of the district's real estate sector allows us to see the difference between the fiscal values that the system uses to charge taxes and the market values at which properties are bought and sold. The combined value of

the sales inventory alone is equivalent to approximately 25% of the district's total minimum fiscal value of all properties, plus the approximate value of constructions.

According to data reported by CFIA, the average construction price per m² has been declared at 229,108 colones per m², approximately \$455, even though the district of Nosara was ranked as the most expensive district in the country per m², above Escazú, according to El Financiero (2023), which cited a price of \$3,495 per m².

As a reference, the size of just the fiscal zone known as “Residencial Proyecto Americano” has an approximate area of 6.97 km², equivalent to 6,970,000 m². A value of \$500 per m² in this location would result in USD 3,485 million as a taxable base - a zone that covers barely 5% of the district's 135 km² and that has stood out as the highest price per m² location in Costa Rica, tripling the price per m² of places like Escazú in San José, with a value of \$3,495 per square meter.

A hypothetical analysis scenario would be to add the sale value of these properties (and assume this will be the value declared in their property tax declaration) and the sum of fiscal values + construction carried out between 2019 and 2025. This results in a value of 3,469,226,970 (USD 3.47 billion), which serves as a reference for a conservative revenue target given the accelerated progressive appreciation of property values in Nosara. This amount does not contemplate adjustments for real estate appreciation, construction informality, undeclared new buildings, or cadastral updates after 2017, so it should be understood as a conservative minimum estimate.

Starting from the previously estimated minimum structural base:

Land fiscal value (2017)

$$₡ 1,097,897,540,000 \div 470 = \text{USD } 2,335,952,213$$

Value of constructions with construction permit, 2019-2025 (CFIA)

$$₡ 166,533,971,459 \div 470 = \text{USD } 354,327,599$$

Original minimum structural base:

$$2,335,952,213 + 354,327,599 = \text{USD } 2,690,279,812$$

Plus, the market value of the list of properties for sale:

$$2,690,279,812 + 778,947,158$$

$$= \text{USD } 3,469,226,970$$

Potential revenue with adjusted base

Applying the current legal Property Tax rate (0.25%):

$$3,469,226,970 \times 0.0025 = \text{USD } 8,673,067 \text{ per year}$$

The district of Nosara also has, based on construction processed through the CFIA, an annual average of 54% of the value of all constructions carried out in the entire canton of Nicoya between 2019 and 2025. Because the homogeneous zone value data has been outdated since 2017, this study constructed a minimum structural approximation of the property base using only official available information, without applying adjustments for market appreciation, informality, or new undeclared constructions. This method aims to establish a minimum structural floor for the district's real estate base as of 2025.

Property tax revenue:

Average between allocation according to construction value 2019 - 2025= 54% y Fiscal Value

District Fiscal Value vs Canton Fiscal Value + Construction Value 2019-2025= 20%

Estimated current contribution: 37% of property tax revenue

Estimated current contribution: $37\% \times 3,391.67 \text{ million} = \text{Q1,254,917,900.00}$ (\$2,670,038.09)

Construction Tax generated in Nosara:

The municipal fee for construction permits in the canton of Nicoya corresponds to 1% of the declared value of processed works. This revenue constitutes a direct source of municipal revenue linked to the territory's real estate and construction activity.

Using the officially declared values for the District of Nosara between 2019 and 2025, the corresponding 1% for each year is calculated, thus obtaining the estimated municipal income derived exclusively from formally processed constructions.

This estimation:

- Does not include informal constructions.
- Does not incorporate undeclared building expansions.
- Does not account for underreported property values.
- Does not adjust for works disbursed without permit.

Therefore, the results represent a minimum structural floor for municipal income from the construction fee.

Calculation of 1% Construction Fee in Nosara per Year

Year	Declared Value (₡)	1% Tax (₡)	Tax (USD, ₡470)
2019	₡ 14,863,011,326	₡ 148,630,113	USD 316,234
2020	₡ 14,250,833,916	₡ 142,508,339	USD 303,213
2021	₡ 18,809,810,764	₡ 188,098,108	USD 400,209
2022	₡ 43,772,351,710	₡ 437,723,517	USD 931,327
2023	₡ 35,941,565,254	₡ 359,415,653	USD 764,715
2024	₡ 24,830,091,994	₡ 248,300,920	USD 528,299
2025	₡ 14,066,306,495	₡ 140,663,065	USD 299,283

Total and Annual Average

Total tax generated, 2019-2025:

₡ 1,665,339,715 ≈ USD 3,543,280

Annual average:

₡237,905,673 ≈ USD 506,183 per year

The formal estimation of the construction permit fee (1%) yields an approximate annual average of USD 506 thousand between 2019 and 2025. However, based on the comparative analysis between cartographic growth and permits granted, a construction informality rate of 60.5% was estimated, which implies that formal activity would represent approximately 39.5% of the actual total disbursed.

When adjusting the construction fee to a scenario of 100% of estimated activity, the potential municipal income rises to approximately USD 1.28 million annually, which multiplies the observed formal income by 2.53. This figure continues to be a conservative estimate since construction values declared to CFIA tend to be lower than actual market values.

The following table summarizes the formal fee and the informality-adjusted fee:

Concept	Annual Tax (₡)	Annual Tax (USD)
Declared construction tax	₡ 237,905,673	USD 506,183
Estimated construction including illegal constructions	₡ 602,186,854	USD 1,281,249

Commercial License Tax

Methodology

To estimate the contribution of the district of Nosara in the Professional, Commercial, and Other Permits (licenses) category, the following criterion was used:

1. The number of registered licenses in 2020 (last available public data) was used as the base:
 - Total cantonal Nicoya: 1.457
 - District of Nosara: 393
2. Nosara's relative share by number of license holders was calculated:

$$\frac{393}{1457} = 26,97\%$$

3. This proportion was applied to the amount of revenue disbursed by the Municipality of Nicoya in 2025 for licenses:

Amount disbursed in 2025: ₡884.950.000

$$884.950.000 \times 26,97\% = ₡238.670.000$$

Result Base (Conservative scenario)

Minimum estimation of Nosara's contribution in 2025: ₡238,670,000

This calculation assumes that all licenses in the canton have similar revenue levels, although in the case of Nosara it is presumed that revenue per license holder is higher than in the other districts of the canton.

Alternative Scenarios

Given that the license tax in Nicoya corresponds to 0.15% of declared gross income, and considering that Nosara concentrates on tourism, real estate, and commercial activities with higher average revenue, adjusted scenarios are proposed.

Scenario Table - Fiscal Weight of Commercial Licenses, Nosara, 2025

Scenario	Estimated Share	Estimated Tax Contribution
Conservative (proportion by number)	26,97%	€238,670,000
Moderate (higher average income)	35%	€309,732,500
High (strong touristic income)	40%	€353,980,000

Interpretation

- In the minimum scenario, Nosara would contribute approximately €239 million in 2025 (USD 507,809).
- Under a reasonable adjustment for concentration of economic activity, the contribution could be between €310 and €354 million.
- This would represent between 27% and 40% of the cantonal total for licenses.

Given the economic profile of the district, characterized by a high concentration of high-value-added tourism and commercial activities, the conservative scenario likely underestimates the actual contribution.

Community Services Revenue

Nature of the revenue: The Community Services item within municipal finances corresponds to income derived from the provision of municipal services, primarily:

- Solid waste collection
- Environmental services
- Other operational community services

This income is not of a tax nature like commercial licenses or the construction fee, but rather represents a service charge, whose behavior depends directly on the number of housing units and intensity of use.

Calculation base

According to official INEC estimates (2022) and Censo Nosara 2024 cartography, the distribution of housing units in the canton of Nicoya is as follows:

- Total dwellings Nicoya canton: 28,838
- Housing points in the district of Nosara: 6,270

Relative share of Nosara:

$$6.270/28.838 = 21,74\%$$

According to this statistical reference, Nosara accounts for 21.74% of total housing units in the canton.

Budget data point 2025

Amount spent by the Municipality of Nicoya in Community Services (2025):

$$\text{€}930,340,000$$

Estimation of the contribution generated by Nosara

Applying the actual proportion of housing units:

$$\text{€}930,340,000.00 \times 21,74\% = \text{€} 202,255,916.00$$

Base result:

Estimate of Nosara's contribution in Community Services 2025: ¢202.26 million (430,331.74 dollars).

Structural Considerations

The previous estimate is based exclusively on the proportion of housing units. However, it should be considered that Nosara presents:

- High tourism activity.
- Higher temporary housing occupancy.
- Concentration on vacation rentals.
- Greater waste generation from commercial and gastronomic activity.

This suggests that the effective consumption of services could be higher than the pure housing weight.

Conclusion

Based on official housing data, the district of Nosara generates at least ¢202 million annually in the Community Services category, representing approximately one-fifth of the cantonal total. This amount also constitutes a relevant component within the municipal revenue structure attributable to the district, alongside the previously listed municipal tax revenue.

3.2.4 Consolidated Annual Tax Revenue Table

The following table consolidates the complete estimated tax revenue estimation for the district of Nosara according to the evaluation scenario for one year:

Concept	Amount (USD)
National contribution	
Value-Added Tax	USD 104,802,393.50
Income Tax	USD 104,802,393.50
National Subtotal	USD 209,604,787.00
Municipal Contribution	
Property Tax (0.25%)	USD 8,673,067.00
Construction Tax (1%)	USD 1,281,249.00
Commercial Licenses (0.15%)	USD 507,809.00
Services	USD 430 331.74
Municipal Subtotal	USD 10,892,457.00
Tax Costa Rican Bomberos (1.75%)	USD 942,649.00
Total Tax Contribution	USD 221,439,893.00

The amount of USD 221.5 million represents the potential revenue that the district should contribute to the Central Government and Municipal Government if tax rates were fully applied to the identified economic base. The difference between this potential and the investment actually received constitutes the territorial fiscal imbalance.

4. MUNICIPAL FINANCE

4.1 Direct Municipal Revenue (Registered)

Below, the data reported by the Municipality of Nicoya to the Comptroller General of the Republic is presented:

Income and Expense Statement, Municipality of Nicoya

(Amounts: million colones)

Year	Income	Expenses	Surplus
2019	€7.670,34	€6.508,69	€1.161,65
2020	€6.787,41	€5.476,85	€1.310,55
2021	€7.902,85	€5.352,81	€2.550,05
2022	€9.927,89	€7.519,34	€2.408,55
2023	€10.272,38	€8.266,69	€2.005,69
2024	€9.951,97	€8.953,81	€998,16
2025	€10.155,26	€9.152,68	€1.002,58

Source: Comptroller General of the Republic

Income Statement, Municipality of Nicoya

(Amounts: million colones)

Year	Current Income	Tax Revenue	Non-Tax Revenue	Current Transfers	Capital Income	Financing
2019	3.575,53	2.760,03	808,37	7,14	2.100,46	1.994,36
2020	4.290,29	2.689,23	854,30	746,76	1.236,59	1.260,53
2021	4.623,04	3.598,81	998,06	26,18	1.786,91	1.492,91
2022	4.999,76	3.967,09	1.003,38	29,29	2.313,36	2.614,76
2023	5.556,04	4.296,62	1.096,67	162,75	2.307,81	2.408,53
2024	5.968,58	4.615,05	1.174,57	178,96	1.880,35	2.103,05
2025	6.355,81	4.893,53	1.312,36	149,93	2.460,46	1.339,00

Source: Comptroller General of the Republic

Capital Transfers and Their Relationship with Laws 8114 and 9329

A significant portion of the Municipality of Nicoya's revenue does not come from local taxes, but from money that the Central Government transfers by law to attend to the cantonal road network (municipal roads).

These resources are recorded in the budget as Capital Revenue corresponding to Capital Transfers from the Central Government.

Within this item there are mainly funds from two national laws:

- Law 8114: finances municipalities with resources from the fuel tax.

- Law 9329: Strengthening the Financing of the Cantonal Road Network.

Both laws have a specific objective: to improve, maintain, and rehabilitate cantonal roads. That is, they are not discretionary funds. They are legally earmarked for road infrastructure.

In simplified terms: when the Municipality receives approximately \$2,300 million in 'Capital Transfers,' that amount corresponds, in its vast majority, to money coming from the Central Government to fix roads, not to revenue generated directly by the canton's economic activity or own resources.

This becomes important because:

- It is not money that the Municipality collects through its local management.
- Cannot be allocated to salaries, general services, or projects other than roads.
- Represents an external source of financing within the Municipality's tax structure.

Among the tax revenue and service charges, the following components stand out in the revenue budgets disbursed by the Municipality of Nicoya:

Tax Revenue and Community Services Income, Municipality of Nicoya

(Amounts: million colones)

Year	Property Tax	Property transfers	Construction Permits	Commercial Licenses	Community Services	Other Income Consolidated
2019	1.612,41	110,99	178,89	623,77	558,92	4.746,76
2020	1.622,49	113,25	162,85	586,69	614,75	3.948,86
2021	2.057,68	317,19	254,62	735,33	673,32	4.864,71
2022	2.330,13	339,21	455,96	748,52	699,85	5.354,21

Year	Property Tax	Property transfers	Construction Permits	Commercial Licenses	Community Services	Other Income Consolidated
2023	2.683,94	167,39	581,71	757,48	768,10	5.313,76
2024	2.973,98	241,24	0,00**	808,83	828,06	5.099,86
2025	3.391,67	186,09	275,60	884,95	930,34	5.486,61

Source: Comptroller General of the Republic

* Other consolidated includes:

- Fines
- Late payment interest
- Rentals
- Property income
- Stamps
- Other taxes
- Current transfers
- Capital transfers
- Financing (free and earmarked surplus)

** In 2024, construction was recorded under a different sub-item.

The following table allows analyzing the percentage structure of the relative weight of each revenue source in municipal finances:

Revenue Structure - Municipality of Nicoya

Year	Property Tax	Property transfers	Construction Permits	Commercial Licenses	Community Services	Other Income Consolidated
2019	21,0%	1,4%	2,3%	8,1%	7,3%	59,9%
2020	23,9%	1,7%	2,4%	8,6%	9,1%	54,3%
2021	26,0%	4,0%	3,2%	9,3%	8,5%	49,0%
2022	23,5%	3,4%	4,6%	7,5%	7,0%	54,0%
2023	26,1%	1,6%	5,7%	7,4%	7,5%	51,7%
2024	29,9%	2,4%	0,0%*	8,1%	8,3%	51,3%
2025	33,4%	1,8%	2,7%	8,7%	9,2%	44,2%

Source: Comptroller General of the Republic

* Construction in 2024 was reclassified in accounting terms.

On the other hand, the tax information of expenditures disbursed by the Municipality of Nicoya is also available according to reports submitted to the Comptroller General of the Republic.

Municipality of Nicoya, Structural Composition of Expenses, Disbursed Budget 2025

(Amounts: colones)

Item	Disbursed (₡)	Share
Payroll	3.176.902.546	34,7%

Item	Disbursed (₡)	Share
Services	1.962.251.648	21,4%
Materials and supplies	415.128.896	4,5%
Interest and commissions	29.640.640	0,3%
Durable goods (investment)	2.638.642.481	28,8%
Current transfers	871.200.293	9,5%
Capital transfers	0	0,0%
Amortization	58.913.875	0,6%
Special accounts	0	0,0%
TOTAL	9.152.680.379	100%

Source: Comptroller General of the Republic

4.2 Investment by the Municipality of Nicoya in the District of Nosara

4.2.1 Investment in Nosara from Capital Transfers and Own Resources per Municipality Report:

According to Official Communication AM-1599-09-2024 from Carlos Armando Martínez Arias, Municipal Mayor, the following is a breakdown of the municipal expenditures that the Municipality of Nicoya has had for the district of Nosara, which do not come from the Municipality's own resources but rather from Central Government legal transfers.

Municipality of Nicoya

Road Investment in Nosara - 2019

#	Route	Project	Amount Received	Investment Amount
1	(ENT.N.160) GARZA	(ENT.C.230) DELICIAS	€2 625 000,00	€2 607 500,00
2	(ENT.C.040) PLAZA NOSARA	(ENT.C.228) STA TERESITA, NOSARA	€3 600 000,00	€3 365 560,66
3	(ENT.C.046) PLAZA NOSARA	(ENT.C.122) ARENALES	€1 125 000,00	€1 051 737,71
4	(ENT.N.160) NOSARA	(ENT.C.046 Y 047) PLAZA NOSARA	€0,00	Modification JVC (COVID-19)
5	(ENT.N.160) LA ESPERANZA	PLAYA GUIONES	€825 000,00	€771 274,32
6	(ENT.N.160) HOTEL CAFE PARIS	PLAYA GUIONES	€600 000,00	€560 926,78
7	(ENT.N.160) LA PIZZERIA	PLAYA GUIONES	€300 000,00	€280 463,39
8	(ENT.N.160) MINI SUPER DELICIAS	PLAYA GUIONES	€750 000,00	€701 158,47
9	(ENT.N.160) HOTEL ESTANCIA	(ENT.C.046) NOSARA	€3 300 000,00	€3 278 000,00

#	Route	Project	Amount Received	Investment Amount
10	(ENT.N.160) RESERVA NOSARA	PLAYA PELADA	€975 000,00	€911 506,01
11	(ENT.N.160) RESERVA BIOLOGICA	HOTEL LAGARTO LODGE	€1 200 000,00	€1 121 853,55
12	(ENT.N.160) SANTA MARTA PLAZA	(ENT.C.293) BARRIO LOS ANGELES SANTA CRUZ	€1 800 000,00	€1 682 780,33
13	(ENT.N.160) SANTA MARTA	(ENT.C.293) BARRIO LOS ANGELES	€3 450 000,00	€3 225 328,97
14	(ENT.C.122) ARENALES	(ENT.C.229) CERRO CEIBA	€3 750 000,00	€3 750 000,00
15	(ENT.C.348) SAN JUAN, CERRO CEIBO	(ENT.C.081) ZARAGOZA, PLAZA	€5 850 000,00	€5 850 000,00
16	CALLES URBANAS (CUADRANTES)	NOSARA DE NICOYA	€2 250 000,00	€2 103 475,41
17	(ENT.C.40) TIPICO LA CASONA	(ENT.C.40) TIPICO LA CASONA	€750 000,00	€701 158,47
18	(ENT.N.160) LA ESPERANZA SUR	(ENT.C.018) DELICIAS	€37 500 000,00	€6 310 426,24
19	(ENT.C.295) RIO MONTAÑA	(ENT.C.046) NOSARA CENTRO	€10 150 000,00	€8 050 000,00

#	Route	Project	Amount Received	Investment Amount
20	(ENT.N.160) NOSARA	(ENT.C.046 Y 047) PLAZA NOSARA	€0,00	Modificación JVC (COVID-19)
21	CALLES URBANAS (CUADRANTES)	NOSARA DE NICOYA	€0,00	Modificación JVC (COVID-19)
22	(ENT.160) GARZA	DELICIAS	€30 000 000,00	€30 000 000,00
23	(ENT.C.046) PLAZA NOSARA	(ENT.C.122) ARENALES	€90 000 000,00	€89 665 150,00
24	(ENT.N.160) NOSARA	(ENT.C.047 Y C047) PLAZA NOSARA	€6 000 000,00	€1 934 546,22
25	(ENT.N.160) LA ESPERANZA SUR	(ENT.C.018) DELICIAS	€30 000 000,00	€30 000 000,00
26	(ENT.N.160) LA ESPERANZA SUR	(ENT.C.018) DELICIAS	€35 000 000,00	€35 000 000,00
27	(ENT.C.040) REST. LA CASONA	(ENT.C.122) ARENALES	€40 000 000,00	€38 750 000,00
28	(ENT.160) SANTA CANTONAL MARTA	BOUNDARY RÍO MONTAÑA	€50 000 000,00	€44 535 000,00
29	(ENT.C.295) RIO MONTAÑA	(ENT.C.046) NOSARA CENTRO	€21 137 660,00	€21 137 660,00
30	(ENT.N.160) HOTEL ESTANCIA	(ENT.C.046) NOSARA	€90 000 000,00	€89 652 668,97

Source: OFICIO AM-1599-09 - 2024, Carlos Armando Martínez Arias, Municipal Mayor.

Total disbursed investment 2019: ₡426 998 175,50

Investment - Period 2020 (District of Nosara)

#	Origin / Entity 1	Destination / Entity 2	Amount (₡)
1	(ENT.N.160) Garza	(ENT.C.230) Delicias	2 625 000
2	(ENT.C.040) Plaza Nosara	(ENT.C.228) Sta Teresita, Nosara	23 600 000
3	(ENT.C.046) Plaza Nosara	(ENT.C.122) Arenales	1 125 000
4	(ENT.N.160) La Esperanza	Playa Guiones	825 000
5	(ENT.N.160) Hotel Café París	Playa Guiones	600 000
6	(ENT.N.160) La Pizzería	Playa Guiones	300 000
7	(ENT.N.160) Mini Súper Delicias	Playa Guiones	750 000
8	(ENT.N.160) Rótulo Hotel Estancia	(ENT.C.046) Nosara	3 300 000
9	(ENT.N.160) Rótulo Reserva Nosara	Playa Pelada	975 000
10	(ENT.N.160) Reserva Biológica	Hotel Lagarto Lodge	1 200 000
11	(ENT.N.160) Santa Marta Plaza	Cantonal boundary with Santa Cruz	1 800 000
12	(ENT.N.160) Santa Marta	(ENT.C.293) Barrio Los Ángeles	3 450 000
13	(ENT.C.122) Arenales	(ENT.C.229) Cerro Ceiba	3 750 000
14	(ENT.C.348) San Juan, Cerro Ceibo	(ENT.C.081) Zaragoza, Plaza	5 850 000

#	Origin / Entity 1	Destination / Entity 2	Amount (₡)
15	Calles Urbanas (Cuadrantes)	Nosara de Nicoya	2 250 000
16	(ENT.C.040) Típico La Casona	(ENT.C.040) Típico La Casona	750 000
17	(ENT.N.160) La Esperanza Sur	(ENT.C.018) Delicias	6 750 000
18	(ENT.C.295) Río Montaña	(ENT.C.046) Nosara Centro	10 125 000

Source: OFICIO AM-1599-09 - 2024, Carlos Armando Martínez Arias, Municipal Mayor.

Total: ₡70 025 000

Investment - Period 2021 (District of Nosara)

#	Route	Project	Amount (₡)
1	(ENT.N.160) Garza	(ENT.C.230) Delicias	2 625 000
2	(ENT.C.040) Plaza Nosara	(ENT.C.228) Sta Teresita, Nosara	3 375 000
3	(ENT.C.046) Plaza Nosara	(ENT.C.122) Arenales	1 125 000
4	(ENT.N.160) La Esperanza	Playa Guiones	825 000
5	(ENT.N.160) Hotel Café París	Playa Guiones	600 000
6	(ENT.N.160) La Pizzería	Playa Guiones	300 000

#	Route	Project	Amount (€)
7	(ENT.N.160) Mini Súper Delicias	Playa Guiones	750 000
8	(ENT.N.160) Rótulo Hotel Estancia	(ENT.C.046) Nosara	3 300 000
9	(ENT.N.160) Reserva Biológica	Hotel Lagarto Lodge	1 200 000
10	(ENT.N.160) Santa Marta Plaza	Cantonal boundary with Santa Cruz	1 800 000
11	(ENT.N.160) Santa Marta	(ENT.C.293) Barrio Los Ángeles	3 450 000
12	Calles Urbanas (Cuadrantes)	Nosara de Nicoya	2 250 000
13	(ENT.C.040) Típico La Casona	(ENT.C.040) Típico La Casona	750 000
14	(ENT.N.160) La Esperanza Sur	(ENT.C.018) Delicias	6 750 000
15	(ENT.C.295) Río Montaña	(ENT.C.046) Nosara Centro	10 125 000
16	(ENT.C.348) San Juan, Cerro Ceibo	(ENT.C.081) Zaragoza, Plaza	24 200 000
17	(ENT.C.122) Arenales	(ENT.C.229) Cerro Ceiba	80 520 000
18	(ENT.N.160) Rótulo Reserva Nosara	Playa Pelada	43 500 000

Source: OFICIO AM-1599-09 - 2024, Carlos Armando Martínez Arias, Municipal Mayor.

Total 2021: €187 445 000

Investment - Period 2022 (District of Nosara)

#	Route	Project	Amount (€)
1	(ENT.C.046) Plaza Nosara	(ENT.C.122) Arenales	1 095 000
2	(ENT.N.160) La Esperanza	Playa Guiones	803 000
3	(ENT.N.160) La Pizzería	Playa Guiones	300 000
4	(ENT.N.160) Reserva Biológica	Hotel Lagarto Lodge	1 168 000
5	(ENT.N.160) Santa Marta Plaza	Cantonal boundary with Santa Cruz	1 752 000
6	(ENT.N.160) Santa Marta	(ENT.C.293) Barrio Los Ángeles	3 358 000
7	Calles Urbanas (Cuadrantes)	Nosara de Nicoya	2 190 000
8	(ENT.C.040) Típico La Casona	(ENT.C.040) Típico La Casona	730 000
9	(ENT.N.160) La Esperanza Sur	Fin de camino, Río Rempujo	1 825 000
10	(ENT.C.295) Río Montaña	(ENT.C.046) Nosara Centro	9 855 000
11	(ENT.C.040) Plaza Nosara	(ENT.C.228) Sta Teresita, Río Nosara	14 371 875
12	(ENT.N.160) Rótulo Hotel Estancia	(ENT.C.046) Nosara (Basurero)	10 539 375
13	(ENT.N.160) Garza	(ENT.C.285) Quebrada Catarata	8 229 500
14	(ENT.N.160) Santa Marta	(ENT.C.296) Río Seco (B° Los Ángeles)	9 248 002
15	(ENT.N.160) Nosara, Café París	Fin de camino, Playa Guiones	66 919 231

#	Route	Project	Amount (€)
16	2019CD-000278-01	Suministro y montaje de superestructura	28 875 000
17	2019CD-000188-01	Construcción de subestructura	28 000 000
18	2021CD-000171-01	Suministro y montaje de superestructura	29 044 868

Source: OFICIO AM-1599-09 - 2024, Carlos Armando Martínez Arias, Municipal Mayor.

Total 2022: €218 303 852,21

Investment - Period 2023 (District of Nosara)

#	Route	Project	Amount (€)
1	(ENT.C.040) Plaza Nosara	(ENT.C.228) Santa Teresita, Río Nosara	2 769 000
2	(ENT.N.160) Garza	(ENT.C.285) Quebrada Catarata	2 769 000
3	(ENT.N.160) Santa Marta	(ENT.C.293) Barrio Los Ángeles	43 989 616
4	(ENT.N.160) Rótulo Hotel Estancia	(ENT.C.046) Nosara (Basurero)	2 618 125
5	Urban Streets	Project Americano Sur	15 815 100
6	Cruce Santa Marta	Nosara Plaza	299 375 579,37

Source: OFICIO AM-1599-09 - 2024, Carlos Armando Martínez Arias, Municipal Mayor.

Total 2023: €367 336 420,37

Investment - Period 2024 (District of Nosara)

#	Route	Project	Amount (¢)
1	(ENT.N.160) Garza	(ENT.C.285) Quebrada Catarata	31 992 477
2	(ENT.N.160) Esperanza Sur	Fin de camino, Río Rempujo	20 023 824
3	(ENT.C.046) Plaza Nosara	(ENT.C.122) Arenales	27 153 360
4	(ENT.C.040) Típico La Casona	(ENT.C.122) Arenales, ICE	24 932 700
5	(ENT.N.160) Quebrada Pelada	Fin de camino, Playa Guiones	30 000 000
6	(ENT.C.046) Plaza Nosara	(ENT.C.122) Arenales	99 983 442,43
7	(ENT.C.040) Típico La Casona	(ENT.C.122) Arenales, ICE	132 025 548,88

Source: OFICIO AM-1599-09 - 2024, Carlos Armando Martínez Arias, Municipal Mayor.

Total 2024: ¢366 111 352,31

Additionally, the mayor's office official communication also reveals information about other items where the Municipality has managed resources toward Nosara. The communication includes the following:

**Other Investments - District of Nosara (Direct investments) mentioned by the Mayor's
Report**

Infrastructure

Project	Description	Amount (€)
Bridge over Quebrada Mala Noche	Design and construction of a new bridge in agreement with the National Emergency Commission. The amount is the CNE budget as recorded in SICOP.	547 137 784,70
Dique de Nosara (2023-2024)	Preventive maintenance	41 965 000
Dique de Nosara (Plan SENARA)	Scheduled investment plan	153 688 936

Environmental Management

Project	Description	Investment (€)
Nosara Recicla agreement	Annual contribution for collection center and recycling	15,000,000 annually
Servicio de recolección de residuos	Coverage 90 km, frequency 2 times per week (No se detalla monto específico en el documento)	

Institutional Management

Project	Description	Investment
Municipal Office in Rent Nosara	+ weekly operation procedures/month average	(76 (Rental amount not specified)

Social Development

Project	Description	Investment (€)
In-kind contributions to CINDEA	Apoyo presupuestario	12 035 000
Annual contribution Red Cross Nosara	Operational agreement	30 000 000 /year
Sistema de cámaras de 40 seguridad	cameras installed (Nosara + Garza)	48 000 000 (2 years)
Cámaras adicionales 2025 (proyectado)	20 cámaras nuevas	40,000,000 installation + 30,000,000 annual operation

4.2.2 Investment in Nosara by the Municipality of Nicoya, with Adjustments Applied to the Mayor's Office Report

Based on the official information analyzed, the municipal investment effectively disbursed in the district of Nosara during the 2019-2024 period was consolidated, considering only verifiable and disbursed amounts.

Exclusions:

- Projects financed by other institutions (for example, the bridge over Mala Noche financed by CNE).
- Agreements authorized only without evidence of execution.

- Convened contributions that were not made.
- Future budget projections.

1. Roads (2019-2024)

Concept	Amount (€)
Total investment in road network 2019-2024	1 636 219 800,39

2. Other confirmed direct investments

a) Dique de Nosara (2023-2024)

Project	Amount (€)
Maintenance of Nosara Dike	41 965 000

b) Rent - Municipal office in Nosara (2022-2024)

Concept	Calculation	Amount (€)
Annual rent	6 000 000 × 3 years	18 000 000

c) Contribution to CINDEA Nosara

Concept	Amount (€)
Contribution	12 035 000

3. Total Direct Investments (no road expenses) (2019-2024)

Concept	Amount (€)
Total direct investments	72 000 000

4. Total Municipal Investment Disbursed in Nosara (2019-2024)

Concept	Amount (€)
Roads	1 636 219 800,39
Other Direct Investments	72 000 000
Total Funding disbursed 2019-2024	1 708 219 800,39

Results

Between 2019 and 2024, total municipal investment disbursed in the District of Nosara amounts to: €1 708 219 800,39

This amount reflects only disbursed and verifiable resources, excluding external contributions and unmaterialized commitments.

Annual Average Municipal Investment in Nosara (2019-2024)

(Currency: colones)

Funding Source	Total 2019-2024 (₡)	Annual average (₡)	% of annual average
Capital transfers - Central Government (Law 8114, Law 9329, and others)	1 636 219 800.39	272 703 300.07	95,8%
Own Municipal Resources:			
• Dique de Nosara	41 965 000		
• Rent Municipal Office Nosara	18 000 000		
• Contribution CINDEA	12 035 000		
Subtotal own resources	72 000 000	12 000 000.00	4,2%
TOTAL	1 708 219 800.39	284,703,300.1	100%

Note: The annual average is calculated dividing the total (6 years: 2019-2024).

In dollars, this would be \$580,219.79 annually from central government law-related transfers, \$25,531.91 from own resources annually on average, which represents a municipal annual average of \$605,751.70.

4.3 Municipal Balance Summary

Between 2019 and 2024, the Municipality of Nicoya managed cumulative budgets of ₡51,832 million, according to the Comptroller General of the Republic. During that same period, direct investment (through legal transfers for roads) recorded in the district of Nosara was ₡1,636,219,800.39, equivalent to approximately 3% of the cantonal budget presented to the Comptroller.

Municipal investment from own tax and non-tax resources does not appear to have a significant relative weight within the investment in the district of Nosara, which highlights a fiscal imbalance solely based on the data that the Municipality itself handles and publishes.

Note:

As of March 5, 2026, the Municipality has not responded to the formal request for detailed financial information regarding municipal revenue sources. Therefore, the analysis presented in this report relies on publicly available information and reasonable estimates based on available data.

It should also be noted that an additional direct return to the district could potentially be attributed through the municipal solid waste collection service. However, this component was not incorporated into the calculations presented above, as its allocation is discretionary and depends on operational and administrative criteria not publicly disclosed.

5. CENTRAL GOVERNMENT PUBLIC INVESTMENT IN THE DISTRICT

5.1 Public Investment Categories

Education Investment (MEP)

For 2025, the Organization for Economic Co-operation and Development (OECD) published the report 'Education at a Glance 2025: Costa Rica,' which establishes that the country's investment per student in public primary and secondary education is USD 5,226 per student per year. This amount covers all investment: infrastructure, salaries, administrative expenses, materials, and indirect costs covered by the State to provide public education. In the case of Nosara, this is the reference expenditure, since there is no public university with campuses in the district nor other forms of public education that would represent additional investment beyond this reference.

On the other hand, according to Censo Nosara 2024 data, 965 students were counted studying in public primary and secondary institutions in the district of Nosara. Some students at these institutions travel from areas outside the district; for example, students from Ferco who travel to Nosara or students from Río Montaña who attend the Santa Marta school. However, the number of 965 will be used as a reference, although the number enrolled in Nosara schools and high school may be higher.

This represents an annual amount of $\text{USD } 5,226 \times 965 \text{ students} = \text{USD } 5,043,090$ per year approximately as current public investment in the district's education sector.

It is very possible that this amount is lower in the district, since the Ministry of Education does not have the cost per institution, school district, administrative district, or per student and zone accounted for, to provide an exact figure, so the approximation with available data would be approximately 5 million dollars per year; although in recent years no significant investments in infrastructure have been made.

The district also has a birth rate similar to that of 14 years ago, according to INEC vital statistics. This could mean that no major investments in new schools are made. For now, the only contemplated project is converting the Bocas de Nosara high school into a technical high school,

but this project was rejected by the Ministry of Public Education, based on the lack of infrastructure to offer technical programs in the district.

Health Investment (CCSS)

Health investment in the district is led by the Costa Rican Social Security Fund (CCSS), which operates the primary care unit known as Basic Comprehensive Health Care Teams (EBAIS). In Nosara, there is one EBAIS facility which operates to provide health services to the community of the district and surrounding areas. This structure represents the closest access point to the public health system for the Nosara community.

According to the report 'Inventory of Health Areas, Sectors, EBAIS, Area Headquarters, EBAIS Headquarters, and Periodic Visit Posts Nationwide as of December 31, 2021,' prepared by the CCSS, the cost of building and equipping a new EBAIS unit is approximately 1 million dollars for a 337 m² facility at a basic Type-1 EBAIS site (the most basic level). On the other hand, a Type-2 unit of 572 m² was built and fully financed by the Municipality of Alajuela in Turrucare in 2019, through a strategic alliance between the integral development association (land), the Municipality (financing and design-construction), and the CCSS (advisory services, supervision, prototype construction plans and technical specifications, medical equipment, and furnishings), for an amount of 378 million colones. At another level, the construction of an advanced clinic for higher population levels (50,000 people) represented an investment of 17.3 million dollars for a 5,800 m² building, with Emergency, Nutrition, Palliative Care, Family and Community Medicine, Electrocardiography, Sterilization, Dentistry, Social Work, Clinical Records (Medical Records), Psychology, Obstetric Nursing, Pharmacy, and Clinical Laboratory services, among others, according to Ticosland. The clinic of Nosara is part of the Nicoya Health Area. Its coverage includes the sectors of Nosara, Garza, and Sámara. The service configuration includes two EBAIS assigned to the Health Area, with the main headquarters at the Nosara EBAIS facilities, with no additional periodic visit posts published. Within the EBAIS, medical teams operate integrating nursing, pharmacy, vaccination, laboratory, dental, and general consultation services. This service usually attends patients with chronic diseases requiring monitoring: people with hypertension, diabetes, asthma, and older adults. It has very limited facility and staff capacity to handle emergencies and urgent care.

Various contract references and comparative cost analyses allow estimating that the annual operating cost of an EBAIS under the subcontracting model (administration by cooperative or third party) is approximately ₡315 million per year.

In contrast, when the operation is assumed directly by the Costa Rican Social Security Fund (CCSS), which implies complete administrative structure, institutional salary regime, social security contributions, and higher indirect costs, the annual operating cost per EBAIS can be approximately ₡540 million per year (USD 1,148,936.17).

In Nosara, two medical teams operate, sharing the same physical facilities. The service is organized in two shifts:

- One team in daytime hours
- One team in afternoon-evening hours

Both teams rotate according to neighborhoods and the concentration of elderly population in each sector, given that older adults constitute one of the main user groups of the service. Both also depend on the same infrastructure and do not have an expanded clinical structure that allows simultaneous emergency care and regular consultation.

The approximate distance of 60 kilometers between Nosara and the Hospital La Anexión in Nicoya makes the local EBAIS a critical point within the healthcare system. In the event of any emergency requiring hospital transfer with a physician:

- The attending physician must suspend regular consultations to accompany the patient.
- Nosara Red Cross does not permanently have paramedics to assume full clinical management during the transfer.

This generates an immediate interruption of ordinary service for the rest of the assigned population. Consequently, the current model is structurally insufficient for a community with nearly nine thousand inhabitants, a high elderly population, and strong tourism dynamics, as it does not allow guaranteeing simultaneous continuity of regular care and timely emergency response.

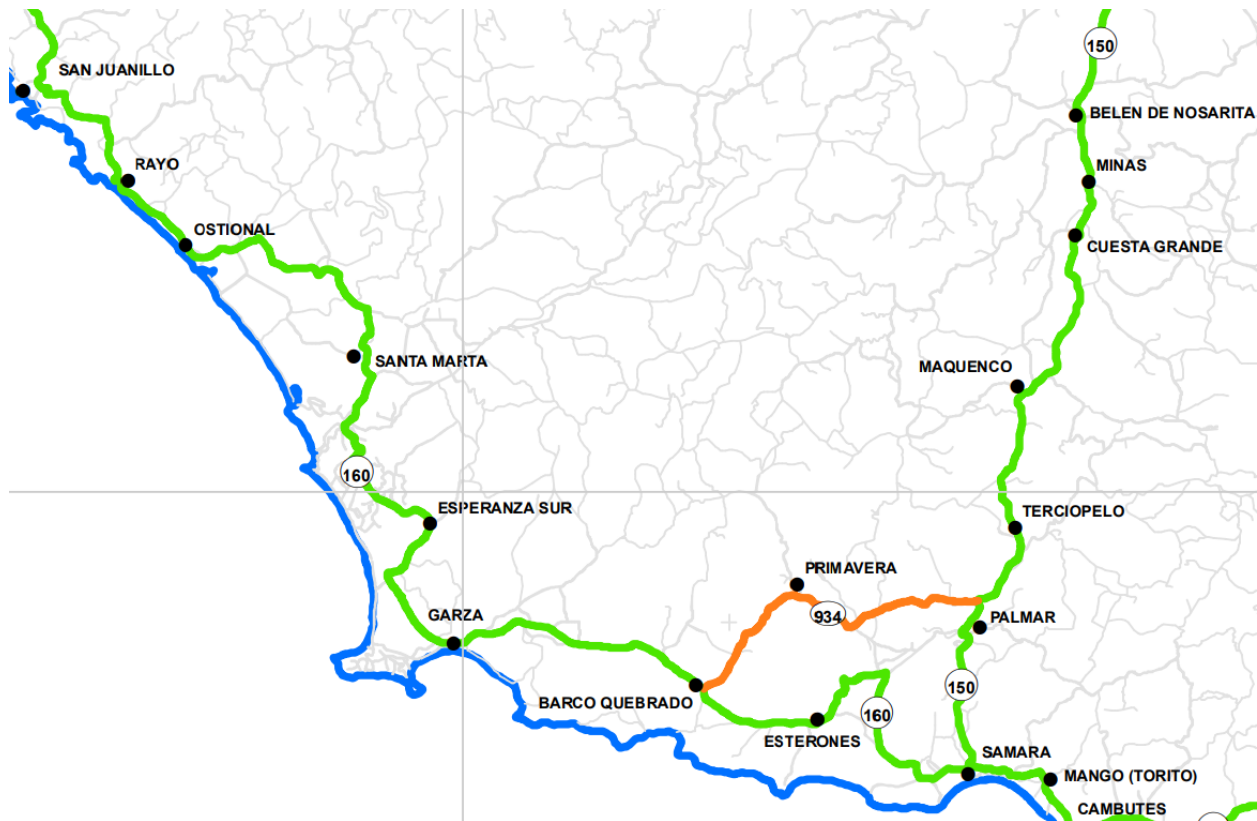
In the specific case of Nosara, the administration model corresponds to direct operation by the CCSS, so the estimated annual cost falls in the upper range indicated: 540 million colones per year $\times$ EBAIS $\times$ 2 shifts = ₡1,080 million per year (USD 2,297,872.34 per year).

Road Infrastructure (MOPT)

The Ministry of Public Works and Transportation (MOPT) does not have a specific published annual budget for addressing repair, maintenance, and improvement needs of the national routes in the district of Nosara.

According to maps published by the MOPT, the national route that crosses the district is secondary route 160 (the entry route to the district from Ferco to the Río Montaña bridge). Although tertiary route 934 is also of great importance for reaching the district and covers from Barco Quebrado to the Sámara junction (this entire stretch is not part of the district of Nosara).

National route map, MOPT - Nosara Sector



Source: National Road Network Map of the province of Guanacaste.

On this national route under MOPT jurisdiction, only one major project has stood out in recent years: the paving of 10 km and the construction of 3 bridges initiated in 2022, with an investment of ₡4,272 million colones according to the source Guananoticias, equivalent to approximately USD 9,089,361.70.

Security (MSP)

The district of Nosara has approximately 21 public security officers as reported in community meetings held in 2025, for personnel groups that are part of the Public Force division of the Ministry of Public Security (MSP).

In order to estimate an average institutional cost per position within the Ministry of Public Security (MSP), a calculation was performed using official information from the Ordinary and

Extraordinary Budget Bill of the Republic for the fiscal year 2026 and data from the Legislative Assembly's Budget Analysis Department.

According to the 2026 budget bill, the total amount allocated to the Ministry of Public Security amounts to ₡356,606.0 million. On the other hand, the technical report from the Legislative Assembly's Budget Analysis Department, cited by CRHoy (September 30, 2025), indicates that the MSP will have a total of 19,205 budgeted positions in 2026.

Based on these two official data points, the average institutional cost per position is calculated as follows:

$$₡356.606.000.000 \div 19.205 = ₡18.571.205 \text{ (USD 39,513.20 dollars)}$$

Average cost:

₡18.6 million per position per year (USD 39,513.20) of institutional coverage cost

This indicator represents a global institutional average, as it includes the entirety of the MSP budget (payroll, social security contributions, operations, goods and services, equipment, maintenance, among other items), divided by the total budgeted positions.

In the case of Nosara, 21 officers would represent an institutional cost of approximately 389 million colones, USD \$829 777,24 dollars for the police station of Nosara.

Other investments include a cost of ₡15,349,206.35 for a new patrol car and ₡5,010,000 for a new motorcycle (as listed by the media outlet Teletica in a note from August 2019), although no new equipment purchase projects have been published, nor does the district have any specialized vehicles or assigned equipment according to the information available for this study. However, a request was included to increase the number of officers to 30 and to have 6 patrol cars and 4 motorcycles for effective security coverage of the district, in the document “Política Local de Seguridad del distrito de Nosara: Nosara Protegida y Segura 2025-2030” (Nosara District Local Security Policy: Nosara Protected and Safe 2025-2030).

Emergencies (CNE)

Emergency prevention labor in the district of Nosara is provided by the National Commission for Risk Prevention and Emergency Response (CNE). The Municipality has implemented strategic infrastructure projects to reduce vulnerability to flooding and extreme hydrometeorological events.

One of the projects is the construction of the bridge over Quebrada Mala Noche, developed in coordination between the National Commission for Risk Prevention and Emergency Response and the Municipality of Nicoya. This work, completed in 2024, represented an investment of more than ₡550 million (USD 1,170,212.76) for the community of Santa Teresita-Santa Teresa.

Additionally, in 2020 the CNE, together with the National Groundwater, Irrigation, and Drainage Service (SENARA), carried out the rehabilitation of the Nosara dike, with an investment exceeding ₡1,161 million (USD 2,470,212.77). The intervention included the construction of deflector walls, reinforced concrete channels, and protection rock fills to control the flow of the Nosara River and reduce erosion and flooding. The work was designed to protect 3,000 people and approximately 500 homes, according to a CNE report.

In the case of the Costa Rican Red Cross, it is an entity that provides public transportation and care services in medical emergency situations, and its funds come from different sources, among which is the 1% tax paid on telecommunications services. According to 2024 national data from SUTEL, the telecommunications market had 6,977,935 active mobile lines and total market revenue close to ₡800 billion in 2024.

Based on this data, the average annual income generated per mobile line can be estimated:

$$₡800,000,000,000 \div 6,977,935 = ₡114,648 \text{ per line}$$

According to Censo Nosara, 6,108 cell phones exist in homes in the district. If the national average income per line is applied, the estimated annual billing attributable to Nosara would be:

The estimated telecommunications billing in Nosara, the contribution to the Red Cross, and the portion allocated to cantonal committees are calculated as follows:

$$6.108 \times \text{C}114.648 = \text{C}700.680.384$$

That is, approximately C700.7 million annually in telecommunications billing associated with the district.

Applying the 1% contribution allocated to the Red Cross:

$$\text{C}700.680.384 \times 1\% = \text{C}7.006.804$$

Therefore, the district of Nosara would be contributing approximately C7 million annually to the financing of the Costa Rican Red Cross through telecommunications consumption.

Considering that 73% of said contribution is allocated to auxiliary committees, the proportional amount corresponding to committee operations would be:

$$\text{C}7.006.804 \times 73\% = \text{C}5.114.967$$

In estimated terms, approximately C5.1 million annually generated from Nosara could be linked to the financing of Red Cross auxiliary committees within the national structure. In contrast, the Nosara Auxiliary Committee does not receive a fixed budget to cover its operations, and instead must seek on its own to generate the resources needed to cover personnel, fuel, and general operating expenses. Despite a commitment to receive 30 million colones per year from the Municipality of Nicoya, the Nosara Auxiliary Committee reports not receiving this committed contribution under the signed institutional agreement.

Housing Benefits

Based on available data from 2014 to 2024 from the Federated College of Engineers and Architects, 117 housing benefits have been processed in those 11 years, with an annual average of only 10.64 bonds at a price according to BANHVI that currently is approximately 9.3 million colones (USD 19,787.23), which would represent an investment of USD 210,536.17 in social housing aid for the entire district, as an annual average.

Other Social Benefits

According to SINIRUBE data, 195 social assistance cases are registered in the district of Nosara, granted according to socioeconomic conditions (extreme poverty, basic poverty, vulnerable, and some non-poor in specific situations), for a total amount of ₡64,935,482 (USD 138,160.60). The identified support includes food assistance (direct delivery, served meals, and food packages for families with malnourished children), personal and hygiene items, family allowances, family care, comprehensive care and daily childcare through the Care Network (Red de Cuido), the Avancemos program, training and formative processes, human development training, Empléate, primary-school support and care for people with special educational needs, the non-contributory pension regime, subsidies (including the family housing bond for construction on one's own lot and public transportation subsidies), microenterprise credit, personal expenses, community works, emergencies, transportation, childcare and child development, as well as distribution of powdered milk for children within specific weight ranges.

The distribution of these benefits shows that the majority are concentrated in households classified as extreme poverty and basic poverty, followed by population in vulnerable conditions, although some cases classified as non-poor also appear (interventions for situations or emergencies).

Unassigned State Services

Below, some state services that were not assigned in the public investment estimation in this technical study are listed because they:

- They do not have physical facilities in Nosara
- They do not have dedicated staff, budget, or exclusive service to attend to district needs
- They respond sporadically according to emergencies, procedures, and special situations

Among these entities are:

- Ministry of Health
- Judicial Investigation Agency

- Ministry of Environment and Energy. The SINAC dependency is responsible for the oversight of the Ostional Wildlife Refuge, of which Playa Pelada and Playa Guiones are part. The refuge staff does not have a permanent presence on both beaches, but as a reference, ₡16,423,357.66 colones would be the amount (USD 34,943.31) per year per position in SINAC for the services it provides.
- National Child Welfare Agency
- Water and Sewerage
- Supreme Electoral Tribunal
- Costa Rica Fire Department
- Electricity services company (ICE) and telecommunications services companies
- Other government agencies

5.2 Public Investments and Procurement: SICOP (2020-2025)

An analysis is available of the purchases made by institutions and entities affiliated with SICOP for investments, services, and supplies destined for the district of Nosara, which are listed below:

Public investments: SICOP (2020-2025)

Institution	SICOP Id.	Date	Project	Amount
ASSOCIATION FOR 2025LD-COMPREHENSIVE ELDERLY CARE	000002-0049600001	19/03/2025	Contratación de servicios profesionales y técnicos	₡7.007.738
ASSOCIATION FOR 2025LD-COMPREHENSIVE ELDERLY CARE	000001-0049600002	03/01/2025	Construction of the Comprehensive Care Center	₡233.591.262
CAJA COSTARRICENSE DE SEGURO SOCIAL	2023LY-000004-0001102599	19/06/2023	Compra de servicios de seguridad y vigilancia	₡178.719.893

Institution	SICOP Id.	Date	Project	Amount
CNE	2024PX- 000536- 0006500001	21/12/2024	Machinery rental	€302
CNE	2023PX- 000045- 0006500001	21/02/2023	Design and construction of Mala Noche bridge	€519.930.277
CNE	2022CE- 000037- 0006500001	08/08/2022	Design and construction of Mala Noche bridge	€519.930.277
CNE	2020CE- 000040- 0006500001	06/11/2020	Rehabilitación dique y obras hidráulicas	€1.239.958.244
CONSEJO TÉCNICO DE AVIACIÓN CIVIL	(various codes 2021- 2025)	2021-2025	Maintenance, pruning, cleaning, and services, Nosara aerodrome	€93.289.140 (total approx sumado)
CEN-CINAI NATIONAL DIRECTORATE	2024LE- 000072- 0012700001	04/09/2024	Servicio de transporte	€16.950.000
ICE	2025XE- 000718- 0000400001	27/08/2025	Electrical services (minor amount)	€85.662.687
ICE	2025XE- 000932- 0000400001	19/11/2025	Electrical services	€21.131.565

Institution	SICOP Id.	Date	Project	Amount
ICE	2025XE- 000932- 0000400001	12/12/2025	Electrical services	€34.936.210
MUNICIPALIDAD NICOYA	DE 2023LE- 000002- 0003900001	31/03/2023	Improvement of Santa Marta Crossing Route	€300.000.000
MUNICIPALIDAD NICOYA	DE 2022CD- 000148- 0003900001	29/09/2022	Various services	€10.625.000
MUNICIPALIDAD NICOYA	DE 2025PX- 000006- 0003900001	27/10/2025	Emergency repair	€1.755.020
MUNICIPALIDAD NICOYA	DE 2022CD- 000119- 0003900001	22/08/2022	Routine road maintenance	€31.200.000
MUNICIPALIDAD NICOYA	DE 2022CD- 000192- 0003900001	21/11/2022	Structure improvement	€9.375.000
MUNICIPALIDAD NICOYA	DE 2022LA- 000007- 0003900001	20/04/2022	Sistema control filas	€10.000.000
MUNICIPALIDAD NICOYA	DE 2025LD- 000057- 0003900001	19/08/2025	Improvement of Dulce Nombre routes	€174.473.216

Institution	SICOP Id.	Date	Project	Amount
MUNICIPALIDAD NICOYA	DE 2024LD- 000030- 0003900001	16/04/2024	Improvement of Plaza Nosara Route	€100.000.000
MUNICIPALIDAD NICOYA	DE 2022CD- 000051- 0003900001	16/03/2022	Bacheo mecanizado	€34.120.000
MUNICIPALIDAD NICOYA	DE 2023LD- 000099- 0003900001	11/10/2023	Pedestrian bridge	€45.000.000
MUNICIPALIDAD NICOYA	DE 2025LD- 000048- 0003900001	10/06/2025	Bacheo mecanizado	€61.899.500
MUNICIPALIDAD NICOYA	DE 2022CD- 000010- 0003900001	10/02/2022	Property lease	€6.000.000
MUNICIPALIDAD NICOYA	DE 2022LA- 000009- 0003900001	07/07/2022	Pedestrian bridge maintenance	€60.000.000
MUNICIPALIDAD NICOYA	DE 2025PX- 000005- 0003900001	06/10/2025	Emergency road enabling	€1.755.020
MUNICIPALIDAD NICOYA	DE 2024LD- 000041- 0003900001	06/05/2024	On-demand maintenance	€20.000.000

Institution	SICOP Id.	Date	Project	Amount
MUNICIPALIDAD DE NICOYA	2025LD-000003-0003900001	03/02/2025	Office lease	€6.000.000

Source: Integrated Public Procurement System

Several of these contracts are services that include various sectors including Nosara. For more direct costing, projects that were directly disbursed in Nosara were identified:

Direct Public Investments and Procurement in Nosara

Institution	Project	Amount (€)
CNE	Dike Rehabilitation and Hydraulic Works	€1.239.958.244
CNE	Mala Noche Bridge	€519.930.277
CNE	Machinery rental for damages	€302
Subtotal CNE		€1.759.888.823
Municipality of Nicoya	Cruce Santa Marta	€300.000.000
Municipality of Nicoya	Plaza Nosara - Arenales Route	€100.000.000
Municipality of Nicoya	Nosara Pedestrian Bridge	€45.000.000
Municipality of Nicoya	Bacheo mecanizado rutas Nosara	€61.899.500

Institution	Project	Amount (€)
Municipality of Nicoya	Pothole filling with gravel Nosara	€34.120.000
Municipality of Nicoya	Maintenance on demand	€20.000.000
Municipality of Nicoya	Road repair emergency	€1.755.020
Municipality of Nicoya	Road enabling emergency	€1.755.020
Municipality of Nicoya	Nosara office lease	€6.000.000
Municipality of Nicoya	Administrative property lease	€6.000.000
Subtotal Municipality		€576.529.540
ICE	Nosara electrical services	€85.662.687
ICE	Nosara electrical services	€21.131.565
ICE	Nosara electrical services	€34.936.210
Subtotal ICE		€141.730.462
Technical Council of Civil Aviation	Nosara Aerodrome projects (exclusive)	€66.000.000 aprox
Subtotal Aviación Civil		€66.000.000
Asociación Atención Integral Adulto Mayor	Construcción Centro Atención Integral	€233.591.262
Asociación Atención Integral Adulto Mayor	Professional services	€7.007.738
Subtotal Asociación		€240.599.000

Institution	Project	Amount (€)
CEN-CINAI National Directorate	Servicio transporte	€16.950.000
Subtotal CEN-CINAI		€16.950.000

Source: Integrated Public Procurement System

Annual Average of Non-Municipal Public Investment in the District of Nosara (2020-2025)

In order to estimate public investment external to local government, investment disbursed by the Municipality of Nicoya was excluded from the analysis, since it was already examined in a specific section of the study.

Only projects exclusively for the district of Nosara disbursed by the following public entities were considered:

- National Commission for Risk Prevention and Emergency Response (CNE)
- Costa Rican Electricity Institute (ICE)
- Technical Council of Civil Aviation (Nosara Airport)
- Association for Comprehensive Elderly Care (Social Protection Board Funds)
- National Directorate of CEN-CINAI

The total amount of non-municipal public investment exclusive to Nosara from purchases registered in SICOP for the 2020-2025 period amounts to: €2,225,168,285

Considering that the period covers six calendar years (2020, 2021, 2022, 2023, 2024 y 2025), the annual average of non-municipal public investment is:

€370,861,381 per year (USD 789,066.77)

This result allows dimensioning with greater clarity the actual level of direct state investment in the territory, excluding both municipal execution (municipal investment is already detailed in another section of this technical study) and projects shared with other districts of the canton. The largest proportion of this investment comes from interventions linked to emergency

response and corrective infrastructure, particularly in the case of CNE, which evidences a reactive rather than planned investment pattern.

Based on the consolidation of data from different Central Government institutions, the average annual non-municipal public investment disbursed in the district of Nosara was estimated.

The following components were included:

- Annual average of public investment (SICOP, CNE, ICE, Aviación Civil, CEN-CINAI): USD 789.066,77
- Social care programs (SINIRUBE): USD 138.160,60
- Housing benefits (annual average): USD 210.536,17
- Ministry of Public Security (21 officers): USD 829.777,24
- Ministry of Public Works and Transportation (project: Route 160, /6 years): USD 1.514.893,67
- Costa Rican Social Security Fund (EBAIS operation): USD 2.297.872,34
- Ministry of Public Education (965 students × USD 5.226): USD 5.043.090,00

Total estimated amount per year:

USD 10,823,397

This amount represents the annual average of direct Central Government public investment in the district, excluding the previously analyzed municipal investment.

It is observed that the largest proportion corresponds to the education sector (46.6%), followed by health (21.2%) and national road infrastructure (14.0%). The remainder corresponds to security, social programs, and specific investment projects.

6. ANALYSIS OF THE TERRITORIAL FISCAL IMBALANCE

6.1 Calculation of Nosara's Fiscal Balance

Below, the fiscal balance of the district of Nosara is presented, separated into its relationship with the Central Government and with the Municipality of Nicoya.

$$\text{Balance} = \text{Generated Revenue} - \text{Public Investment Received}$$

Centralized Fiscal Balance

(Nosara - Central Government Relationship)

Table: Central Fiscal Balance

Concept	Amount (USD M)
Potential National Tax revenue (VAT + IncomeTax)	209 604 787,00
Bomberos of Costa Rica Tax	942 649,65
Total potential contribution	210 547 436,65
Public investment from central government in Nosara	10 823 396,78
Fiscal imbalance	199 724 039,87

Municipal Fiscal Balance

(Nosara - Municipality of Nicoya Relationship)

Structural Potential Fiscal Contribution

Concept	Amount (USD M)
Property Tax (0.25%)	8 673 067,43
Construction Tax (1%)	1 281 249,00
Estimated Commercial Licenses	507 808,51
Community Services	430 331,74
Fiscal contribution - Estimated structural amount	10 892 456,67

Estimated Current Fiscal Contribution

Concept	Amount (USD M)
Property Tax (0.25%)	2 670 038,09
Construction Tax (1%)	506 183,00
Estimated Commercial Licenses	507 808,51
Community Services	430 331,74
Fiscal contribution - Current	4 114 361,33

2.2 Municipal Fiscal Gap

Concept	USD M
Structural potential contribution	10 892 456,67
Estimated current contribution	4 114 361,33
Fiscal gap	6 778 095,34

Municipal Investment in Nosara (2019-2024)

Concept	USD M	%
Law-related funds (Budget for roads)	580 219,79	95.8%
Direct Investments	25 531,91	4.2%
Municipal Investment in Nosara	605 751,70	100%

Municipal Fiscal Imbalance

Indicator	Result
Fiscal contribution vs. total investment	6%
Potential municipal fiscal imbalance	10 286 704,97
Current contribution vs. total investment	15%
Estimated current fiscal imbalance	3 508 609,63

6.2 Possible Explanations for the Imbalance

Hypothesis 1: Fiscal Centralization and Political Factor

Costa Rica concentrates tax revenue at the national level. Although Nosara generates significant activity (tourism, real estate investment, construction, commerce and services for properties, etc.), most of the contribution in taxes (income tax and VAT) is collected from San José. Only a fraction returns through transfers. Investment of these taxes may be concentrating in areas of greater social need (Nosara can be considered a “developed” district, overlooking its social-environmental reality and economic inequality), as well as in districts and areas with a larger electoral population. Although Nosara has a very high permanent and seasonal population, just over half of the permanent population is registered to vote in the district, which itself has high abstention rates. This means it does not carry political weight in terms of the size of the participating electorate in national and municipal elections.

Hypothesis 2: Tax Domicile Outside the Territory

Some companies may have their tax domicile outside Nosara (San José or abroad). Income taxes are recorded in other territories, even though activity occurs locally. However, Nosara does not have a presence of large hotel chains, restaurant chains, or commerce chains that would imply a tax declaration outside Nosara due to centralized domicile issues.

Hypothesis 3: Informality

A significant fraction of Nosara's economy operates informally. The activity does not generate official taxation even though it generates employment and added value. For example, the short-term accommodation sector presents high tax informality, even though it generates services such as air-conditioning maintenance.

Hypothesis 4: Sectoral Composition

The residential tourism sector has characteristics: seasonality, indirect informal employment, and low capture of local surpluses. Tourist spending could leak toward operators that have their

tax domicile in economies where Costa Rica does not have an agreement, thus reducing the local economic multiplier. This implies a structural gap between generated activity and captured fiscal contribution.

Hypothesis 5: Insufficient Public Investment

It is possible that public investment is historically insufficient compared to local economic capacity. That is, that governmental management of public investment is designed for a size, complexity, and diversity of population issues that are inferior to those affecting a district whose economic capacity is developing.

6.3 Estimation of Tax Evasion and Potential Revenue by Component

Nosara's fiscal gap is the cumulative result of three distinct phenomena: active tax informality, absence of cross-institutional control mechanisms, and a tax base that the cadastral system has not updated in eight years while the market transformed at unusual speed. This section disaggregates the gap by specific mechanism, distinguishing between estimated evasion (where there is an unfulfilled tax obligation) and uncaptured potential revenue (where the institutional lag prevents collection).

National Reference Framework

According to Ministry of Finance Communiqué CP-30-2025, national tax non-compliance is estimated at 5.7% of GDP. Disaggregated by taxpayer profile: individuals with profitable activity, 87% non-compliance; legal entities, 46%; VAT, 41%; salary withholding, 14%. The first three profiles dominate Nosara's economic structure, but this study considers a sectoral approach rather than a taxpayer-subject approach.

A. Estimated Evasion: National Taxes

A.1 Short-term accommodations

According to data from the Costa Rican Tourism Board (ICT), of the 1,500 active short-term accommodations in the district, only 51 are registered with the ICT platform: a registration informality rate of 96.6% - the platform that constitutes the mandatory cross-check mechanism with the Ministry of Finance for tax payment. Applying this proportion to the sector's annual revenue - USD 51.9 million, adjusted by 15% for operating costs - yields an estimated taxable base of approximately USD 42.6 million in unreported revenue. The potential VAT and income tax are calculated on this basis.

Tax	Calculation	Estimated Evasion
VAT	$13\% \times \text{USD } 42,615,090$	USD 5,539,962
Income Tax	$15\% \times \text{USD } 42,615,090$	USD 6,392,264
Subtotal Short-Term Accommodations		USD 11,932,225

Methodological Note A.1: The source of the revenue data is the records of digital platforms (Airbnb/Vrbo) compiled by AirDnA. The 15% discount on the tax base reflects operating costs (cleaning, maintenance, platform) that reduce the effective taxable income according to the tax base. The calculation considers only the portion not registered with the ICT platform (96.6%). Non-registration in the ICT platform does not necessarily imply tax non-compliance in all cases: some operators may be unaware of the registration requirement, lack an active taxpayer identification number, or be paying taxes through other channels not verifiable with this source.

A.2 Solidarity tax (luxury homes)

The application threshold for 2025 is ₡145,000,000 (approximately USD 308,500), calculated on the value of construction and fixed installations, excluding land, according to Decree No. 44834-H. Rates are progressive between 0.25% and 0.55% by brackets.

Of the subset of 261 residential properties in the inventory, 227 exceed that threshold when construction is estimated at 60% of the market price (a conservative assumption given the local market profile), where the land component tends to be dominant. The potential solidarity tax applying the progressive brackets of Decree No. 44834-H to individual properties was estimated. This represents USD 586,979 in potential contribution in that sector of the selected sample. Since the declaration is triennial, many owners are foreign nationals without active tax registration in Costa Rica, and cross-checking with the National Registry is limited, so the effective compliance level in the district is presumably low.

Methodological Note A.2: The individual property calculation applies the progressive brackets of Decree No. 44834-H on 60% of the market price as a proxy for construction value. This assumption may underestimate the base in properties where construction represents a higher proportion and overestimate it in lots with minimal construction. The result should be interpreted as an order of magnitude, not as an exact figure.

This represents USD 586,979 in potential contribution in that sector of the selected sample.

B. Estimated Evasion: Municipal Taxes

B.1 Licenses for informal rentals

The 1,449 units without tax registration would also not have an active municipal license. On the informal revenue of USD 50.1 million, the license rate of 0.15% yields a municipal evasion of USD 75,203 annually.

B.2 Fee and property tax on informal construction

60.5% of construction disbursed in the district between 2020 and 2024 was carried out without a formal permit: 152,201 m² of the estimated total 251,572 m². With a reference value of USD 680/m² (CFIA, average value 2025), the informally built value amounts to USD 103.5 million in the period. The immediate fiscal effect is the loss of the municipal construction fee (1%): USD 1,034,967 that did not enter the municipal treasury. It is important to note that the USD 680/m² value is possibly under-declared, since local construction companies may charge USD 1,000/m² or more for construction work.

The most far-reaching effect is the cumulative impact on the property tax. Each unregistered square meter represents a permanent deduction from the tax base: the property exists, generates value, but the tax system does not capture it. Estimating the IBI base at 60% of the constructed value, the uncollected IBI on new informal construction amounts to USD 155,245 in year one, with a growing effect on the accumulated stock: USD 776,225 in year five and USD 1,552,450 in year ten.

Subtotal estimated municipal evasion: USD 1,265,415 / year

Total estimated evasion (A + B): USD 13,784,619 / year

C. Uncaptured Potential Revenue by Component at the National Level

C.1 Income from capital gains on sales

The active inventory of 591 properties totals USD 778,947,158. Assuming a three-year turnover (in line with the investment profile of the Nosara market), the estimated annual transaction volume is USD 259,649,053. If those transactions generated an average capital gain of 30% on the purchase price, the taxable gain would be USD 77,894,716 and the 15% tax would amount to USD 11,684,207 per year.

This figure does not constitute directly provable evasion: it reflects the contribution that Nosara's real estate market would generate if all transactions correctly declared capital gains. The absence of cross-referencing between the National Registry, the General Directorate of Taxation, and other international jurisdictions makes effective verification impossible, and

many transactions may not effectively declare their full capital gain. For example: cryptocurrency payments to purchase properties in Costa Rica that are made in the USA.

Methodological Note C.1: The 3-year turnover assumption is conservative for a market with high speculative demand. The 30% gain assumption is equally conservative: in areas like Guiones and Pelada, documented appreciation in the 2017-2025 period widely exceeds that threshold. Both assumptions underestimate the actual potential collection.

Subtotal national potential revenue: USD 11,684,207 / year

D. Uncaptured Potential Revenue - Municipal

D.1 Property tax gap due to outdated fiscal base

This is the component of greatest magnitude and lowest institutional visibility. The Property Tax is calculated on the fiscal value set by the Technical Standardization Body (ONT). The last value update for the District of Nosara dates from 2017. In the eight years elapsed, zones that the cadastre valued as peripheral or agricultural have become consolidated tourism corridors with prices comparable to the most developed coastal markets in Central America.

To quantify the gap, a base of pure lot prices (without construction) was built from the 215 properties in the total inventory of 591 identified as real estate sales inventory according to available information. Of those, 141 had area and sector data that allowed calculating a median price per square meter. That price was compared with the current ONT fiscal value by zone:

Sector	Fiscal ONT (USD/m ²)	Market median (USD/m ²)	Ratio	n	Source ratio

Delicias	2.55	79.9	31x	9	Sample
ZMT Playa Garza	8.09	158.0	20x	14	Sample
Arenales	17.89	286.1	16x	4	Sample
San Juan	11.92	102.3	9x	16	Sample
Nosara Centro	8.23	67.5	8x	8	Sample
Ángeles - Rivera Norte	11.92	85.6	7x	5	Sample
Esperanza	16.41	114.0	7x	16	Sample
Guiones	148.94	540.0	4x	42	Sample
Pelada	148.94	391.9	3x	24	Sample
Santa Marta	31.91	56.2	2x	5	Sample
Otras zonas (4 zonas)	var.	-	3x	-	Conservative scenario

The ratios per zone were applied to the total fiscal base of each zone according to ONT data, extrapolating to the complete district universe. The currently estimated property tax collected is USD 2,670,038. The potential property tax if the tax base reflects market values amounts to USD 32,292,208, which implies a gap of USD 29,622,170 annually; a factor of 12.1x over what is currently collected.

This difference does not constitute leakage in the strict sense for all cases and the entire amount: property owners pay what the law charges them on the current base, and there is also a lag in value updates, since the area's real estate market moves more through purchases that are not financed through credit in the National Banking System. Cash purchases of properties rely on the new owner to carry out the fiscal value update every 5 years. What this analysis documents is that the tax base is systematically outdated, that this outdated disproportionately benefits higher-net-worth owners who buy properties in cash, and that a cadastral update would generate substantial municipal revenue without modifying any tax rate.

Methodological Note D.1: The analysis is based on lot prices without construction (215 of 591 properties in the inventory). This delineation is methodologically relevant: pure lot prices reflect land value more directly and without the construction component, which would introduce an additional assumption about depreciation or replacement value. Incorporating properties with construction into the ratio calculation would require separately estimating land value and construction value, which would mean an assumption upon an assumption; the resulting adjustment would yield an even higher gap, but with greater methodological uncertainty. For that reason, the more conservative and directly observable base was chosen. Additionally, the market price of an actively-listed lot incorporates expectations of future appreciation and relative scarcity that the fiscal value (calculated on present-use value) does not capture in the same way. The result is, therefore, an estimate of the gap. For the four zones without an active market sample (9.4% of the total fiscal base), a conservative ratio of 3x was assigned.

Subtotal potential municipal revenue: USD 29,622,170 / year

Total potential revenue (C + D): USD 41,306,377 / year

Consolidated Table - Estimated Fiscal Gap by Component, District of Nosara, 2025

	Component	Annual Estimate
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A	Estimated Evasion sectorial - national taxes	
	VAT from informal accommodations	USD 5,539,962
	Income tax from informal accommodations	USD 6,392,264
	Solidarity tax on luxury homes (representative sample, not extrapolated)	USD 586,979
	National sectoral subtotal	USD 12,519,205
B	Estimated evasion by component - municipal taxes	
	Business license tax from informal accommodations	USD 75,203
	Construction permit fees from informal construction	USD 1,034,967
	Property tax (IBI) from new informal construction	USD 155,245
	Municipal evasion subtotal	USD 1,265,415
	Total estimated evasion (a + b)	USD 13,784,619
C	Uncollected potential revenue - national level	

	Capital gains income (purchase/sale)	USD 11,684,207
	Subtotal potential revenue by component	USD 11,684,207
D	Municipal potential revenue by component	
	Property tax gap: assessed fiscal value vs. market value	USD 29,622,170
	Subtotal potential revenue municipal	USD 29,622,170
	Total potential revenue by component (C + D)	USD 41,306,377
	Total estimated municipal fiscal gap by component (B + D)	USD 30,887,585
	Total estimated fiscal gap by component (A+B+C+D)	USD 55,090,997

Calculation record

The following tables document all assumptions, sources, and operations used in the estimation. Each component is independently verifiable.

General Parameters

Reference exchange rate	₡470 / USD (2024, BCCR)
Analysis period	2024-2025
Municipal property tax rate (IBI)	0.25% on fiscal value (Law 7509)
VAT rate	13% (Law 9635)
Capital gains tax rate	15% (Law 9635, art. 35)
Solidarity tax rate	Progressive 0.25%-0.55% (N.° 44834-H, 2024)
Municipal business license tax rate	0.15% on revenue (Municipality of Nicoya)
Construction permit fee rate	1% on building value

A.1 - VAT & Income Tax, short-term rentals	
Source of informality	ICT, response to direct inquiry, 2025
Total active accommodations	1,500
Registered accommodations paying taxes	51
ICT registration informality rate	$(1,500 - 51) / 1,500 = 96.6\%$
Total sector revenue	USD 51,900,000 (alojamientos en Airbnb y Vrbo, ICT 2025)

Informal revenue	USD 51,900,000 × 96.6% = USD 50,135,400
Operating cost deduction	15% (cleaning, platform, maintenance) approximated by Ministry of Finance
Tax base	USD 50,135,400 × 85% = USD 42,615,090
VAT evaded	USD 42,615,090 × 13% = USD 5,539,962
Income tax evaded	USD 42,615,090 × 15% = USD 6,392,264
Subtotal A.1	USD 11,932,225

A.2 - Solidarity tax (luxury homes)	
Threshold 2025	€145,000,000 / 470 = USD 308,511
Legal taxable base	Construction value + fixed installations (excludes land)
Proxy	60% of market price = estimated construction value
Residential homes	261
Properties above threshold	227 (87% of the subset)
Method for calculation	Progressive brackets Decree No. 44834-H per individual property

Total solidarity tax	USD 586,979 / year
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B.1 - Commercial licenses for short-term rentals	
Base	Income: USD 50,135,400
Rate	0.15%
Result	$\text{USD } 50,135,400 \times 0.0015 = \text{USD } 75,203$

B.2 - Property & construction tax	
Source	CFIA permits 2020-2024 vs. estimated built stock (section 3.1.5)
M ² declared (CFIA)	99,371 m ²
M ² total estimation	251,572 m ²
M ² illegal construction	152,201 m ² (60.5%)
Value of reference	USD 680/m ² (CFIA, weighted average 2024)
Value of buildings	$152,201 \times 680 = \text{USD } 103,496,680$
Construction Tax (1%)	$\text{USD } 103,496,680 \times 1\% = \text{USD } 1,034,967$

Base for Property Tax	$\text{USD } 103,496,680 \times 60\% = \text{USD } 62,098,008$
Property Tax year 1 (0.25%)	$\text{USD } 62,098,008 \times 0.0025 = \text{USD } 155,245$
Property Tax year 5 (stock)	$\text{USD } 62,098,008 \times 5 \times 0.0025 = \text{USD } 776,225$
Property Tax year 10 (stock)	$\text{USD } 62,098,008 \times 10 \times 0.0025 = \text{USD } 1,552,450$

C.1 - Income from capital gains	
Stock: 591 properties for sale	USD 778,947,158 (see section 5)
Turnover assumption	3 years (conservative for speculative market)
Estimated annual sales	$\text{USD } 778,947,158 / 3 = \text{USD } 259,649,053$
Capital gain assumption	30% on purchase price (conservative)
Taxable annual gain	$\text{USD } 259,649,053 \times 30\% = \text{USD } 77,894,716$
Capital gains tax rate	15% (Ley 9635)
Potential tax	$\text{USD } 77,894,716 \times 15\% = \text{USD } 11,684,207$
Warning	It is not provable evasion; it is potential revenue if all transactions declare

D.1 - Property Tax Fiscal GAP vs market value	
Total fiscal base (ONT 2017)	$\text{Q1,097,897,540,000} = \text{USD } 2,335,952,213$ (Municipality of Nicoya / ONT)
Currently estimated property tax collected	USD 2,670,038 / year (study estimate)
Market sample used	141 lots without construction with known m ² and sector (out of 215 total identified)
Selection criteria	Only lots without construction to avoid assumption upon assumption in the land/building split
Estimator used by sector	Median price (robust to outliers)
Zones with market sample	90.6% of the total fiscal base (11 of 16 zones)
Zones without sample	9.4% of the total fiscal base - conservative 3x assigned ratio
Ratios applied by zone	See Section D.1
Potential property tax (sum by zone)	$\Sigma (\text{base fiscal USD} \times \text{ratio} \times 0.0025) = \text{USD } 32,292,208$
Property tax gap (IBI)	$\text{USD } 32,292,208 - \text{USD } 2,670,038 = \text{USD } 29,622,170$
Global multiplier factor	12.1x

Main limitation	The market price of actively listed land incorporates speculative expectations that are not reflected in the fiscal value.
Secondary limitation	Incorporating properties with construction would require estimating land/building split: assumption upon assumption. It would yield an even higher gap with greater uncertainty.

Own elaboration with data from ICT (2025), CFIA (2024), Ministry of Finance CP-30-2025, Municipality of Nicoya / ONT (2017), National Registry, and market real estate inventory (591 properties, 2024-2025). Exchange rate: ₡470/USD.

Summary Table of Strategic Indicators

Indicator	Result
Statutory transfers / Estimated current contribution	14%
Own resources invested / Estimated current contribution	0.6%
Own resources invested / District structural potential contribution	0.2%
Own resources invested / District potential contribution by component	0.1%
Nosara generates X times what it receives in own resources	161

Indicator	Result
Nosara could generate X times what it receives in own resources	427
Nosara could generate up to X times what it receives in own resources	1 210
Nosara generates X times what it receives in municipal investments (own resources + statutory transfers from the central government)	7
Nosara could generate X times what it receives in municipal resources (own resources + law-related transfers)	18
Nosara could generate up to X times what it receives in municipal resources (own resources + law-related transfers)	51
Nosara receives ____% of the resources it generates for the Municipality	0.6%
For every dollar that Nosara generates for the Municipality of Nicoya, the district receives ____ of that dollar in return as direct public investment	0.6 cents
For every dollar that Nosara generates for the Municipality of Nicoya, the district receives ____ of that dollar in return as legal transfers from the Central Government for roads	14 cents
Nosara generates __% of what it could potentially generate	38%
Nosara generates __% of what it could generate by economic components	13,32%

Indicator	Result
Nosara receives ____% of the resources it generates for the Municipality	0,62%
Nosara is failing to receive approximately ____% of what it could capture	99,92%

Section 6.1 estimates the district's potential fiscal contribution on the registered and observable tax base. Section 6.3 disaggregates the specific mechanisms by which that contribution does not materialize: sectoral informality, undeclared construction, and cadastral outdatedness. Both exercises are complementary and not directly comparable, given that they start from different methodological approaches.

7. METHODOLOGICAL LIMITATIONS

This study constitutes a structural estimation exercise based on available statistical inputs and internationally used methodologies for approximating territorial economic activity in the absence of disaggregated official data.

7.1 Energy Proxy Is Not Actual GDP

The use of electricity consumption as a proxy for district Gross Domestic Product constitutes an indirect approximation. This approximation is not a direct accounting measurement of value added.

Among its main limitations are the following:

- Improvements in energy efficiency can reduce consumption without decreasing economic activity.
- Distributed generation or local renewable energy not registered as direct purchase from ICE could underestimate activity.
- High tourism seasonality produces significant monthly variations in consumption.
- Not all economic activities have the same energy intensity.

Therefore, the result represents a structural approximation, which is not the same as an official measurement of national accounts.

7.2 Non-Territorialized Tax Data

The Ministry of Finance does not publish tax revenue disaggregated by district. Centralized taxation estimates are based on applying national rates to the estimated proxy GDP.

Consequently, the results reflect theoretical tax potential.

7.3 Energy Intensity Assumptions

The model uses the national GDP/kWh ratio as a multiplier applicable to the district. However, it is important to consider that Nosara's productive structure differs from the national average. Additionally, Costa Rica includes manufacturing, free trade zones, and service sectors that affect the national electricity-productivity relationship differently than Nosara's tourism-intensive economy.

This implies that economic productivity per unit of energy could differ from the national average.

7.4 Estimated Floating Population

The estimate of additional temporary population (26,650 people) is based on structural approximations derived from Censo Nosara 2024 by housing capacity.

There is no administrative registry by institutions that measures the number of tourists or temporary residents at the district level continuously throughout all days, months, or years. The floating population varies by season and specific events.

7.5 Taxes Collected Outside the District

Part of the economic activity generated in Nosara may be taxed outside the territory because the tax domicile is located in other cantons or abroad, due to centralized declarations in San José when their headquarters are in the center of the country, or by tourism or real estate operators based outside the district but operating in the area with their activities.

This implies that local economic contribution does not necessarily coincide with the territorial accounting of revenue collection.

7.6 Lack of Complete Official Data

There are relevant components not quantified due to absence or non-response to the request for public data:

- Actual revenue disaggregated by district.
- Updated real estate values after 2017.
- Actual financial statements of tourism establishments.
- Comprehensive registry of economic informality.
- Municipal information segregated by district in revenue generation (As of March 5th, 2026).

This limitation is due to the structure of statistical publication in Costa Rica. Formal information requests were submitted to municipal and national tax authorities, without methodological omission.

7.7 Use of Preliminary Data or Institutional Estimates

Some figures used correspond to preliminary 2024 national GDP data, information provided institutionally through direct request, and economic press reports as a secondary source of sectoral context referenced to official sources.

These figures could be adjusted following future official revisions.

7.8 Under-Declaration and Gap Between Fiscal and Market Value

The real estate base used starts from the Ministry of Finance's 2017 homogeneous zone values and values declared to CFIA in formal procedures. These elements are not incorporated in that base:

- Accelerated real estate market revaluation.
- Under-declaration of construction values.
- Subsequent unregistered constructions.

This implies that the estimated tax base may be conservative relative to the actual economic value of the real estate stock.

7.9 Use of International Reference (Iceland)

The 2.6% used as the proportion of the accommodation sector relative to GDP comes from Iceland's Tourism Satellite Accounts.

Given that there are no complete disaggregated data on the tourism sector in Nosara, only the accommodation component was used as a comparable structural reference.

However, Iceland has a different productive structure with a different tax regime and a different tourism composition. The percentage is used as a structural methodological reference for approximation without implying an exact equivalence.

7.10 Accommodation Revenue Estimation

Annual accommodation revenue was estimated from the number of active accommodations and the estimated average income per property. Therefore, given the lack of data on the business accounting of accommodations, the result is a reasonable structural approximation.

7.11 Inclusion of Economic Multiplier Effects

The study estimates the direct economic base of the district but does not incorporate local productive linkages, tourist spending multipliers, or economic leakage to other territories.

Consequently, the total economic impact could be greater or less depending on the sectoral structure and flows with other territories.

7.12 Exchange Rate Used

Monetary conversions were performed using an exchange rate of ₡470 per USD 1, the average reference observed in February 2026 according to Central Bank of Costa Rica indicators.

Exchange rate variations could marginally alter amounts expressed in dollars, although they do not modify the structural relationships of the analysis.

7.13 Unestimated Municipal Collection Administrative Salaries

This study does not estimate the administrative salaries of the Municipality of Nicoya's collection staff dedicated to the Nosara office, for the following reasons:

- 1) The analysis period is 2019 to 2024, a period during which this office was not fully operational.
- 2) The municipal government's own report did not include this information.
- 3) Financial information was requested from the Municipality's Finance Department, and as of July 2026 it has not yet been sent.
- 4) Any estimated calculation or approximation of this tax-collection expense line would exceed the direct investment received.
- 5) Non-relevant costs: indirect costs such as fuel, vehicle expenses, and office printing are not considered; this study is not an accounting record or an accounting audit, it is an analysis of the tax balance.
- 6) Methodological contributions are welcome to feed this analysis with reports on financial information that the Municipality may provide.

8. PUBLIC POLICY IMPLICATIONS

8.1 Need for Better Subnational Statistics

One of the main lessons and limitations found in this study is that the Central Government (INEC, Ministry of Finance, BCCR) should publish economic activity, employment, and tax revenue data disaggregated at the district or cantonal level.

8.2 Better Budget Allocation

If Nosara generates these levels of economic activity at the district level for central and municipal government public budgets, revenue collection and public investment in services must be proportional. Current allocation must be reviewed in light of the actual economic capacity of the territory, and confronted with realities such as fiscal leakage, tax avoidance, and information errors.

8.3 Improved Local Taxation

With this data, the Municipality of Nicoya could:

- Improve property tax coverage
- Update commercial license records and include short-term accommodation economic activity within services requiring a license
- Implement targeted rates for the tourism-real estate sector, where the greatest tax evasion in the local economy appears to exist
- Invest in Nosara resources that come from own revenue sources - both tax and non-tax - in a much greater proportion to compensate for what the district helps generate versus the services it receives, especially in essential and critical community services.

For the District Council of Nosara, Community Development Associations, and civic leaders of the district of Nosara, community members, voters, and inhabitants of Nosara:

- Exercise citizen participation in the construction of budgets presented and approved by the Municipality, which includes identifying and activating advocacy and citizen oversight mechanisms.
- Oversee the public investment presented in those budgets, the revenue amounts, the control efforts over evasion, under-declaration, and information errors.
- Pursue a proportional correlation that is territorially, socially, economically, and solidarity fair between the revenue the district generates and the public investment it receives.
- Given the level of fiscal imbalance, the political-tax situation of the canton, the slow pace of attention, and the challenges facing the district of Nosara, as well as its growth projecting more than 8,000 new housing units before 2035 (in 9 years), for a total of 14,000 housing units that will have a territorial, social, and environmental impact on the current and future community of Nosara, this study recommends seriously considering entering a new municipal procedure for the creation of a Municipal District Council that allows Nosara to have autonomy in the collection, investment, and

distribution of its municipal taxes, with direct participatory democratic governance among its residents.

8.4 Update of Territorial Planning

Territorial development plans must incorporate an updated economic base assessment. Infrastructure investment must anticipate projected growth that represents more than double the current housing stock in less than 9 years.

8.5 Replicability of the Model

The methodology can be replicated in other tourism districts (Tamarindo, Manuel Antonio, Uvita) to generate national comparisons of fiscal resource generation, evasion, and territorial public investment.

9. CONCLUSION

Nosara is undoubtedly a unique territory. It is the second-fastest growing district in annual population according to INEC estimates. It has increased its housing stock to nearly double in just 5 years. Nosara has built, almost without proportional institutional support, a dynamic, globally connected economy that generates tax revenue several times what it receives back. The fiscal imbalance documented in this study is not an accident: it is the structural result of a tax system that collects centrally and returns marginally.

What is presented here is a first serious technical-tax exercise, constructed with available data, with internationally used methodologies, and with the conviction that measuring is the first step to demanding. The results indicate that Nosara generates estimated economic activity exceeding USD 2 billion annually and contributes more than USD 210 million in potential national taxes, of which only a fraction materializes as public investment in the territory.

Beyond a number, it is a reality that families, visitors, and businesses in the district must live with every day: roads in poor condition, deficient infrastructure, public services that fail or respond slowly. And for institutions, it has been easy to forget how to serve in the presence of foreign donors and community leaders trying to fill the gaps. This is a social and territorial fiscal injustice that has been evidenced through the analysis.

This study aims to rigorously document the numbers and return this tension as a tool to those who must make decisions at the local, cantonal, and national levels, to translate them into real actions in real territories. The methodology applied here can and should be replicated. Tamarindo, Manuel Antonio, Uvita, La Fortuna - there are dozens of Costa Rican territories with the same unanswered question: how much do we generate, how much do we receive, and what explains the difference? Answering those questions is not an academic exercise; it is the minimum basis for an honest conversation about decentralization, territorial equity, reversal of fiscal, socio-economic, and environmental extractivism, and the kind of inclusive country we want to build from the territorial reality of districts that are exemplary at the national level, such as the case of Nosara.

BIBLIOGRAPHY

Sources consulted and used in the preparation of this report:

Arrieta, E. (2025, April 11). 2024 Recorded the Worst Fiscal Revenue Performance in the Last Three Periods. La República.

Legislative Assembly of Costa Rica. (2025). Technical report of the Budget Analysis Department on the Ordinary and Extraordinary Budget Bill of the Republic 2026.

Public Services Regulatory Authority (ARESEP). (2025). Electric tariffs of the distribution system.

Central Bank of Costa Rica. (2025). Gross domestic product by economic activity: official series with preliminary figures through 2024. <https://www.bccr.fi.cr>

Central Bank of Costa Rica. (2026). Economic Indicators: Reference Exchange Rate and Main Rates. <https://www.bccr.fi.cr>

World Bank. (2023). World Development Indicators: GDP, population, GDP per capita - Costa Rica. <https://data.worldbank.org>

National Housing and Urban Development Bank (BANHVI). (2025). Updated Amount of the Family Housing Bond.

Bretschger, L. (2015). Energy prices, growth, and the channels in between: Theory and evidence. *Resource and Energy Economics*, 39, 29-52.

Costa Rican Social Security Fund (CCSS). (2021). Health Areas Report, sectores, EBAIS, sedes y puestos de visita periódica al 31 de diciembre de 2021.

Costa Rican Chamber of Construction. (2025). The construction sector and real estate activities contribute ₡4.8 trillion annually to GDP and more than 489,000 jobs in Costa Rica. Delfino.cr.

<https://delfino.cr/2025/05/sector-construccion-y-actividades-inmobiliarias-contribuyen-con-48-billones-de-colones-anuales-al-pib-y-mas-de-489-mil-empleos-en-costa-rica>

Censo Nosara 2024. (2024). Results Censo Nosara 2024. <https://www.censonosara.com>

Federated College of Engineers and Architects of Costa Rica (CFIA). (2019-2025). Construction permit records by district. Data provided through institutional request.

National Commission for Risk Prevention and Emergency Response (CNE). (2020-2024). Projects executed in the district of Nosara.

Comptroller General of the Republic (CGR). (2019-2025). Municipal budget settlements - Municipality of Nicoya.

CRHoy. (2025, 30 de septiembre). *Presupuesto 2026 incluye recursos para 1.843 puestos nuevos.*

Delfino.cr. (2025). Telecommunications Market Generated Nearly ₡800 Billion in Revenue in 2024.

El Financiero. (2023). Districts with the highest price per square meter in Costa Rica.

Guananoticias. (2022). *MOPT Invests ₡4.272 million on Route 160 in Nosara.*

Costa Rican Electricity Institute (ICE). (2025). Annual electricity consumption of the district of Nosara. Data provided institutionally.

Costa Rican Tourism Board. (2025). Registry of tourism companies and activities: Tourist accommodation, District of Nosara. Direct inquiry to the Registry Unit, February 2025.

National Institute of Statistics and Census (INEC). (2022). Population and Housing Estimates.

National Institute of Statistics and Census (INEC). (2024). Vital Statistics.

Low Carbon Power. (2024). *Electricity consumption per capita - Costa Rica*.
https://lowcarbonpower.org/es/region/Costa_Rica

Ministry of Public Education (MEP). (2025). Enrollment Data - District of Nosara.

Ministry of Finance. (2017). Map of homogeneous zone values - Canton of Nicoya. Technical Standardization Body.

Ministry of Finance. (2024). Fiscal statistics and budget settlement of the Central Government 2021-2024.

Ministry of Finance. (2025). Estimate of tax non-compliance in Costa Rica.
<https://www.hacienda.go.cr/docs/CP302025.pdf>

Ministry of Public Works and Transportation (MOPT). (2022). Map of the Classified National Road Network - Province of Guanacaste.

Ministry of Public Security (MSP). (2026). Ordinary and Extraordinary Budget Bill 2026.

Municipality of Nicoya. (2024). Official communication AM-1599-09-2024. Mayor's Office.

Organisation for Economic Co-operation and Development (OCDE). (2025). Education at a Glance 2025: Costa Rica.

United Nations Development Programme (UNDP). (n.d.). Human Development Atlas.

República de Costa Rica. (2001). Law No. 8114: Tax Simplification and Efficiency.

Republic of Costa Rica. (2008). Law No. 8690: Creation of the Parafiscal Contribution to the Telecommunications Service for the Financing of the Costa Rican Red Cross Association.
<https://pgrweb.go.cr/scij>

Republic of Costa Rica. (2015). Law No. 9329: Reform to strengthen the financing of the cantonal road network.

National Groundwater, Irrigation, and Drainage Service (SENARA). (2020). Rehabilitación del dique de Nosara.

Integrated Public Procurement System (SICOP). (2020-2025). Public procurement executed in the district of Nosara.

National Information and Unique Registry System for State Beneficiaries (SINIRUBE). (2025). Beneficiaries by district.

Statistics Iceland. (2024). *Tourism Satellite Accounts 2024*.
<https://www.statice.is/publications/news-archive/national-accounts/tourism-satellite-accounts-2024/>

Stern, D. I. (2011). The role of energy in economic growth. *Annals of the New York Academy of Sciences*, 1219(1), 26-51.

Teletica. (2019). Cost of patrol cars and motorcycles for the Public Force.

Ticosland. (s.f.). *Construcción de clínica avanzada en Costa Rica*.

Note regarding exchange rates:

The exchange rate used in the study: ₡470 per USD 1, is an average market reference observed in February 2026 according to indicators published by the Central Bank of Costa Rica.

Note regarding review and linguistic support:

During the preparation of this document, digital linguistic assistance tools based on artificial intelligence were used as support for grammatical review, improvement of expository clarity, and specific translation of text fragments.

The methodological design, information gathering, data analysis, calculations, interpretation of results, and conclusions are entirely the work of the author. The tools used served solely an editorial function of technical support in writing and style.

Note on road infrastructure financing:

Street repair and paving is financed primarily through legally mandated transfer funds that the Central Government allocates to the Municipality (Laws 8114 and 9329), not through the municipal taxes Nosara pays to Nicoya. The Municipality invests part of these transfer funds in the district, and could add its own resources to them; if Nosara comes to have its own Municipal District Council, that council could also allocate additional resources of its own to road projects. This distinction matters because it can cause confusion between three separate categories: investment in street repairs, tax-collection staff salaries, and the actual return to Nosara that comes specifically from what the district contributes to the Municipality in taxes.

Note on cross-verification with official data from the Municipality of Nicoya

It is worth establishing the degree of external verification this study has received since its publication. A territorial fiscal analysis like this one, built through a reverse-engineering method on public sources (without access to the Municipality of Nicoya's internal accounting system at the time it was prepared), is exposed to three foreseeable types of questioning: (i) that the figures "do not correspond to reality," (ii) that they come from a "third-party document" with no institutional value, and (iii) that they duplicate or contradict information already produced by the Municipality.

This section addresses these three concerns directly, based on official data issued by the Municipality of Nicoya itself.

Origin of the verification

On April 7, 2026, one day before the public presentation event, the Finance Department of the Municipality of Nicoya issued Oficio DF-0023-2026, signed by MBA. José Ernesto Baltodano Cárdenas, Finance Director. The document was issued in direct response to a formal information request submitted in February 2026 by the research team for this study, in accordance with Article 30 of the Political Constitution and Law 9097 on the right of petition.

The document contains the Municipality's official internal accounting system (DECSIS) records on tax generation attributable to the district of Nosara for the 2025 period. This is the first

institutional statement by the Municipality of Nicoya with district-level disaggregated data on Nosara, and constitutes the most relevant verification source possible for a territorial fiscal balance study.

Verification results

Below is a comparison between the figures estimated in this study (built exclusively from public sources: Comptroller's Office, CFIA, electoral registry, ARESEP, INEC, municipal transfer records) and the figures reported by the Municipality in Oficio DF-0023-2026:

Total tax generation (Nosara, 2025)

Indicator	Study (estimate)	Municipality (official)	Difference
Total tax generation	€1.93 billion	€2.19 billion	11.7%

A deviation of 11.7% on an estimate built without access to the Municipality's internal system constitutes, methodologically, a robust verification margin. For comparative purposes, territorial fiscal estimation models published by organizations such as the World Bank, the OECD, and ECLAC routinely work with verification margins when contrasting estimates against primary administrative data.

Verification by tax line

Precision by component is even more significant than the aggregate:

Tax line	Study (estimate)	Municipality (official)	Observation
Business licenses (patentes)	Estimate within 5% of the official value	Confirmed by Oficio DF-0023-2026	Essentially exact verification

Property tax	Conservative estimate ₡540M below the official value	Reported collection higher than the base estimate	Reinforces the structural argument about outdated cadastral values (12.1x cadastral gap factor documented in this study)
Community services (waste collection, other)	Within the projected range	Confirmed by Oficio DF-0023-2026	Consistent verification

Additional finding revealed by the verification

Oficio DF-0023-2026 also documents, on the ₡2.19 billion generated in 2025, an aggregate delinquency rate of 40%, with specific rates of:

- 40% delinquency on property tax
- 50% delinquency on business licenses
- 46% delinquency on waste collection services

This means that approximately ₡871 million annually (in Nosara alone) go uncollected due to operational limitations in the Municipality's collection capacity. This figure was not part of the study's original scope (which deliberately focused on the major gross-generation lines and excluded interest, fines, and administrative charges to maintain a conservative estimate). Oficio DF-0023-2026 incorporates this dimension and presents it as official information.

Reverse reading: the declared values implicit in the municipal charge

Oficio DF-0023-2026 enables an additional reverse-engineering exercise: from the amount the Municipality of Nicoya put up for collection in each tax and the applicable legal rate, it is possible to reconstruct the gross declared value on which it is actually charging.

Tax	Amount put up for collection (₡)	Rate	Gross declared value (₡)	Gross declared value (USD)
Property tax	1,794,840,122.27	0.25%	717,936,048,908	1,527,523,508
Business licenses (patentes)	226,662,812.12	0.15%	151,108,541,413	321,507,535
Construction value	101,764,783.98	1%	10,176,478,398	21,652,082

For property tax, a charge of ₡1,794,840,122.27 at 0.25% implies that all properties in the district are declared before the Tax Administration at just ₡717,936 million (USD 1,527.5 million). To gauge how low that figure is: the market offer value of only 591 properties identified in this study (USD 778.9 million) equals more than half (51%) of the declared fiscal value of every property in the district. Five hundred properties for sale are worth as much as everything the Municipality has on record as the taxable base of a district with thousands of properties.

For business licenses, a charge of ₡226,662,812.12 at 0.15% implies declared gross taxable revenue of ₡151,108 million (USD 321.5 million) for all commercial activity in the district. Against a district economy estimated at approximately USD 2,130 million per year, this means the municipal tax system observes only about 15% of the economic activity Nosara generates, consistent with the documented informality and weak municipal tax control.

National taxes also fall on that same declared gross revenue (₡151,108 million). Applying an effective VAT rate of 11% and an income tax rate of 15%, the State should be receiving ₡16,621,939,555.47 (USD 35.37 million) in VAT and ₡22,666,281,212.00 (USD 48.23 million) in income tax on the commercial activity that is in fact declared. This study, in turn, estimates the potential collection of those same national taxes on the district's real economic base at USD 104.8 million in VAT and USD 104.8 million in income tax (USD 209.6 million combined; Section 3.2). Both figures come from different methods and are not strictly equivalent: the first applies effective rates (VAT 11%, income tax 15%) to the gross declared revenue that serves as the base for the municipal charge, while the second estimates the national potential from the relationship between those taxes and the district's GDP (4.93% of GDP per tax). The comparison is therefore one of order of magnitude and direction, not an accounting equality. The contrast

reveals a double under-capture: even starting only from what is declared, the national taxes owed far exceed what the system appears to be capturing, and the real base on which taxes should be paid is several times larger than the declared one.

For construction, a fee of ₡101,764,783.98 charged at 1% implies a declared works value of ₡10,176 million (USD 21.65 million) for the period, a low figure given the district's construction dynamism and the estimated 60.5% informality in permit filing.

Taken together, these declared values do not describe Nosara's real economy: they describe only the fraction of that economy the tax system manages to see and capture. The distance between the declared value and the real value is, precisely, the fiscal gap this study quantifies.

Methodological conclusion

Three points are institutionally established based on Oficio DF-0023-2026:

First, the figures in this study converge with the official records of the Municipality of Nicoya within a margin of 11.7%, which validates the model's structural assumptions. Second, the study is not a "third-party document" disconnected from municipal sources: it uses as input the reports the Municipality itself sends to the Comptroller General of the Republic and the public records derived from them, and now has cross-verification from the Municipality's internal system. Third, the study's findings on the territorial fiscal gap do not contradict the official data: they expand and disaggregate it at the district level, a dimension the Municipality does not produce in its regular accounting.

On future observations

Any technical observation on specific figures in this study can be processed based on the following principle: all criticism is welcome when accompanied by (i) the figure in question, (ii) the page of the study where it appears, and (iii) the alternative source that contradicts it. Without these three elements, an observation does not constitute actionable technical criticism and falls outside the methodological scope of this document. When an observation meets the three requirements and reveals a genuine error, the study is corrected transparently, with public credit given to whoever pointed it out, in accordance with standard research practice.

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