



COUNTRY SELECTION PROJECT

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EXECUTIVE **SUMMARY**

SITUATION

Walmart is looking to place a distribution center in Central America. The company has decided to place the distribution center in one of three countries, Guatemala, Honduras, or Nicaragua. In this report, we will determine which of these three countries is the best option.



CRITERIA

GOVERNMENT STABILITY	25%
INFRASTRUCTURE	25%
LOCATION	20%
ECONOMY	20%
SOCIAL STABILITY	10%
TOTAL	100%

In order to determine the best location for a Walmart distribution center, five criteria were decided on to help ascertain which country provides the best fit. These five criteria focus on government, infrastructure, geographical, economic, and social factors. Government stability and country infrastructure have the largest weight in our multi-attribute model. The reason being that between these three countries, government stability and infrastructure will have the greatest impact on a distribution center.

FINDINGS

Honduras has the most stable government, with relatively few coups and good relations with the U.S. Although the road infrastructure in Honduras is not the best, its performance averages out over all categories of distribution method (i.e. seaports, airports, roads), which would allow for greater flexibility. Honduras is also centrally located, which would provide easy access to all of Central America, including El Salvador and Costa Rica. Compared to the other countries, Honduras performs worse in social stability due to a high homicide rate and economic factors suggest a comparable if not favorable environment for establishing another business unit in Central America.

Guatemala has a slightly less stable government than Honduras due to a recent coup, however despite subsequent tensions the country still maintains a mostly positive relationship with the U.S. Guatemala has the best infrastructure in everything, except roads, which is Walmart's most important and currently relied upon method of transportation. Guatemala contains the most Walmart-owned stores, but is also the furthest north. Due to a high GDP per worker and other factors, Guatemala has the highest social stability. Additionally, the country's economic performance indicates on average the strongest economic freedom of the three.

Nicaragua has the least stable government with an anti-American socialist group currently in charge limiting freedom. The country has the best road system of all the countries but suffers greatly in all other areas of infrastructure. It is the furthest south of the three and contains the fewest number of Walmart-owned stores. Nicaragua has the second best social stability due to low levels of crime and a moderate GDP per laborer. Nicaragua boasts the highest growth rates compared to Honduras and Guatemala, however, all other evidence indicates the nation has the least amount of economic freedom.

SOLUTION

Honduras should be chosen as the home to a new distribution center because it has the ideal location, most stable government, most diverse infrastructure, and good relations with the U.S. We feel that, although it does not perform the best in every category, it excels where it really matters and avoids many of the problems that other countries face. We feel that Honduras is the best location for Walmart to optimize distribution operations in Central America.



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WALMART NEEDS TO BUILD A DISTRIBUTION CENTER TO SERVICE LATIN AMERICA. THE THREE OPTIONS ARE GUATEMALA, NICARAGUA, HONDURAS.



INTRODUCTION

Walmart is looking to place a distribution center in Central America. The company has decided to place the distribution center in one of three countries, Guatemala, Honduras, or Nicaragua.

This distribution center will be serving the countries of El Salvador, Guatemala, Costa Rica, Honduras, and Nicaragua. Walmart does have a presence in Brazil, Argentina, and Chile but this potential distribution center will not be serving those countries due to distance. It would be more cost-effective for Walmart to build a distribution center to serve the South American countries as opposed to having a distribution center in Central America constantly driving long distances.

In order to make a decision of where the distribution center should be, five criteria have been selected to determine which country would be the best location for the distribution center. All five of these criteria have different percentages of weights based on the most to the least important.

These are five criteria we selected and the weights assigned:

GOVERNMENT STABILITY	25%
INFRASTRUCTURE	25%
LOCATION	20%
ECONOMY	20%
SOCIAL STABILITY	10%
TOTAL	100%

Government stability takes into account the level of fluctuation of power that does or can exist in government institutions or political systems.

Infrastructure focuses on what the transportation and utility infrastructure of the country looks like, more specifically what the quality of road, air, and sea transportation are like. This also includes the efficiency and connectivity of these modes of transportation. Utility infrastructure examines the country's access and reliability to water and electricity.

Location evaluates the best geographical area for a distribution center to service the specific countries that fall into the boundaries. Other factors such as climate and property rights are included when evaluating location.

Social stability gauges the life-structure of the country. Specifically focusing on two large issues which are crime rates and workforce productivity.

Economy focuses on how economically free each country is. This is done by evaluating factors such as population, GDP, growth rate per capita, unemployment, inflation, FDI inflow, currency exchange, imports, and exports in order to help determine how economically free and strong each country's economy is.

GOVERNMENT STABILITY

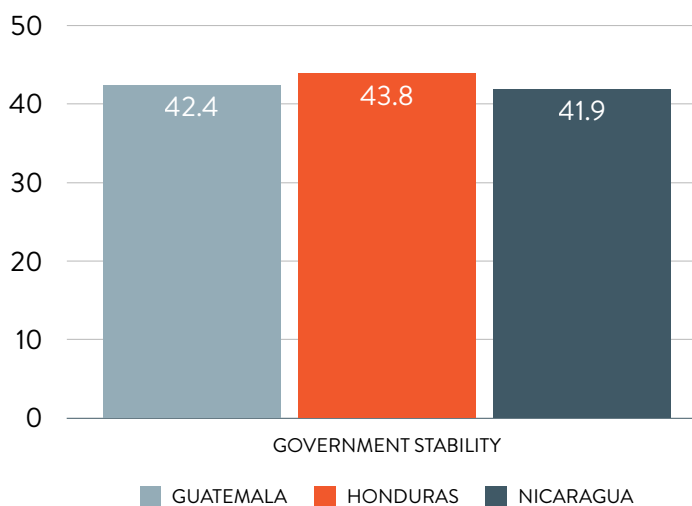
Guatemala received a score of 42.4 from the Global Competitiveness Report and was ranked 121 out of 141 countries (“Global Competitiveness Report”). This is fair considering the recent coup in 2015, the 36 year-long civil war, and the corruption of politicians related to the drug trade (“Guatemala Profile - Timeline.”). The government is unstable and politics are not well-loved by the people. Luckily, Guatemala does have a mostly positive relationship with the U.S. which would help making a distribution center be successful, as long as the pro-U.S government doesn’t change.

Honduras received 43.8 and was ranked 116 out of 141 (“Global Competitiveness Report”). Honduras is the most stable of the three countries. Although some leaders are suspected of being corrupt and working in the drug trade, the government as a whole has taken a firm stand against the gangs and drug cartels and they have become more unified for it. It did experience a coup in 2009, but the effects seem to be mostly minimal, although tensions have risen since the 2017 (Johnston) election which was viewed by many as corrupt. The country is also mostly Pro-US which helps. Since the government is mostly stable, a distribution center would be quite possible in Honduras.

Nicaragua received 41.9 and was ranked 124 out of 141 (“Global Competitiveness Report”). Nicaragua is in last when it comes to political stability, which is understandable when one considers the turmoil fraught throughout Nicaraguan history. Socialism versus capitalism was an important issue that leads to the rise of the Sandinista party and even the creation of an anti-socialist terrorist group backed by the U.S called the Contras (L., Melanie). The Sandinista party is still in power, so feelings are not that great toward the U.S., but the Contra movement ideals are still alive in the country which inspires revolts and rebellions, as well as massacres and suppression by the Sandinista party. Nicaragua is a level three travel risk due to these issues, and would not be the best location for the Walmart Distribution Center.

After researching all three countries, we are in agreement with the Global Competitiveness Report that Honduras is the most stable, and therefore the best option for this category to place a distribution center. Guatemala is still overcoming recent tensions from the coup of 2015, and Nicaragua is one tick away from war and not very friendly towards the U.S. and capitalism. Honduras is more stable and views the U.S. in a positive light, so of the three choices, it is the most advantageous.

GOVERNMENT STABILITY COMPETITIVENESS SCORES



SOURCE: THE WORLD ECONOMIC FORUM 2019 GLOBAL COMPETITIVENESS REPORT

INFRASTRUCTURE

WALMART

One of the main necessities for a Walmart distribution center is sufficient road infrastructure within the country, because Walmart uses road transportation as its main shipping method from its distribution centers to retail stores (“Our Business”). When analyzing each country, the most important factor will be road infrastructure, followed by sea, air, and utility infrastructure.

RATING METHOD

The World Economic Forum 2019 Global Competitiveness Report (“Global Competitiveness Report 2019”) was used in order to assess the countries’ various infrastructures. The report analyzes how 141 countries compete in the global economic landscape with one of the categories being infrastructure, which is broken down into transport and utility infrastructure. When analyzing transport infrastructure attributes of connectivity, efficiency, and quality will be examined. When looking at utility infrastructure, electricity access/supply, and water cleanliness/reliability will be examined. Below each country’s infrastructure will be analyzed using the Global Competitiveness Report. The report scores individual infrastructure attributes on a scale of 1 to 100, with 100 being the best, unless otherwise noted.

	GUATEMALA	HONDURAS	NICARAGUA
INFRASTRUCTURE	55.9	57.4	55.6
TRANSPORT INFRASTRUCTURE	37.2	43.1	40.3
ROAD CONNECTIVITY	38	55.7	71
QUAL. OF ROAD INFRASTRUCTURE	24.1	50.9	53.8
AIRPORT CONNECTIVITY	35.6	29.6	26.3
EFFICIENCY OF AIR TRANSPORT	52.4	54.6	45.1
LINER SHIPPING CONNECTIVITY	24.5	11	8.9
EFFICIENCY OF SEAPORTS	48.4	56.6	36.4
UTILITY INFRASTRUCTURE	74.5	71.7	70.9
ELECTRICITY ACCESS % OF POP.	92	75	90
ELECTRICITY SUPPLY QUAL. % OF OUTPUT	91.6	87	81.2
EXPOSURE TO UNSAFE DRINKING WTR. % OF POP.	58.2	78	71.3
RELIABILITY OF WATER SUPPLY	56.4	56.8	41.2

SOURCE: THE WORLD ECONOMIC FORUM 2019 GLOBAL COMPETITIVENESS REPORT

COUNTRY BREAKDOWN

Guatemala received a high score in their air and sea transportation, with low scores in their road infrastructure (“Global Competitiveness Report 2019”). Guatemala has significantly worse road connectivity and quality of road infrastructure than Honduras and Guatemala. Guatemala beats the other countries across the board in utility infrastructure. If a company were looking to build in a country based on the utility infrastructure alone, Guatemala would be the country to do so.

Compared to the other two countries, Honduras’ transportation ranking is in the middle of Guatemala and Nicaragua. Besides efficiency of air and seaport services, Honduras ranks second in every other category (“Global Competitiveness Report 2019”). The country is balanced when it comes to their transportation infrastructure. Just as Honduras is in the middle of both countries in transportation infrastructure, they are so with utility infrastructure as well. With the exception of electricity access, the country is second to Guatemala in all areas. According to the rankings, we can conclude that Honduras is a well-balanced country compared to Guatemala and Nicaragua.

Nicaragua has superior road connectivity and road quality compared to the other countries. Despite their superior road connectivity and quality, Nicaragua ranks last in every other category of transport infrastructure (“Global Competitiveness Report 2019”). This could be a problem when it comes to their airport connectivity, which is important for corporate officers to come and supervise the center. The utility infrastructure of Nicaragua is exceptionally lacking. They rank last in every area with the exception of electricity access, which could be a cause for concern when deciding to place a distribution center in this country.

INFRASTRUCTURE SUMMARY

Although the countries rank closely in certain fields and far apart in others, in agreeance with the Global competitiveness report (“Global Competitiveness Report 2019”), Honduras is the country with the best overall infrastructure which would prove to be ideal for a Walmart distribution center.

Nicaragua has the highest score of road connectivity and quality, yet ranked lowest in every other category with the exception of the utility attributes. The risk would be too high to build a distribution center just based on the road quality and connectivity alone when the other qualities are ranked so poorly.

Guatemala’s infrastructure is ranked higher than the other countries in every category except the two most important attributes, road connectivity and road quality. Choosing Guatemala would be a risk because even though they have the best utility infrastructure, air, and sea transportation, they have poor road infrastructure which is not a worthwhile trade-off.

Honduras is the most balanced and most consistent in terms of infrastructure. Despite Honduras not having the highest ranking in road connectivity, they have an overall balance of all modes of transportation and utility infrastructure. Overall, the country presents the least amount of risk when it comes to building a distribution center.

LOCATION

GEOGRAPHICAL OPTIMIZATION

One factor in optimizing the location of a distribution center is how centrally located the center is to the stores it will be supplying. Walmart entered the Central America region in 2005. Currently, Walmart has 255 retail units in Guatemala, 107 in Honduras, 103 in Nicaragua, and additional stores in El Salvador and Costa Rica (“Central America”). These retail units include Walmart Supercenter, Dispensa Familiar, Mzxi Dispensa, Super Paiz, and La Union. While a majority of the stores are located in Guatemala, a distribution center in Honduras allows for closer proximity to the southern countries in Central America without significantly increasing distance to stores in Guatemala.

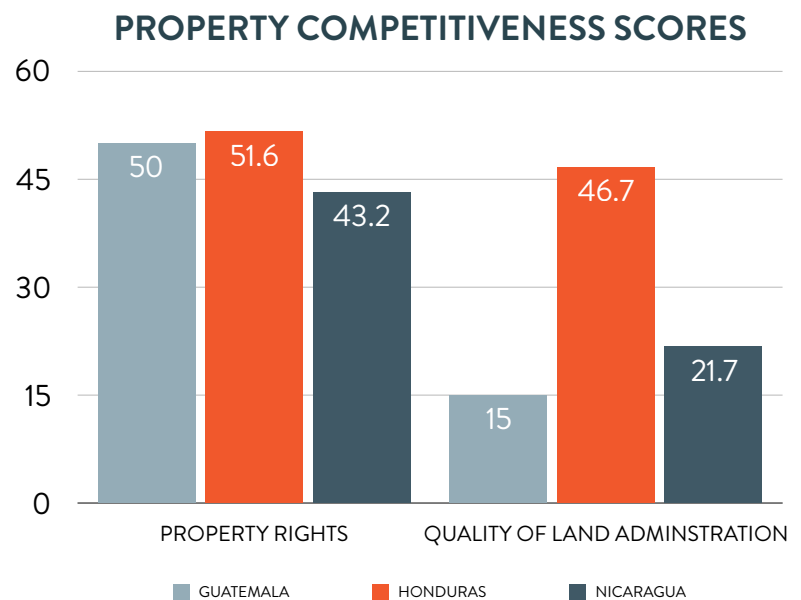


CLIMATE

Due to the similarities between these countries, climate is not a highly significant component. However, there are slight differences that are worth noting. According to a Euromonitor report recording the number of climatic natural disasters per country, Guatemala has experienced two in the last seven years, while Honduras and Nicaragua have experienced zero in the last seven years (“Climatic Disasters...”). This, however, does not imply that there will be less natural disasters in Honduras or Nicaragua in the future. Similarly, according to the last recorded year, Honduras receives the lowest levels of rainfall (1,976 mm/year) compared to Guatemala (1,996 mm/year) and Nicaragua (2,280 mm/year) (“Average Precipitation...”).

PROPERTY

The World Economic Forum 2019 Global Competitiveness Report shows that Honduras has the highest scores (“Global Competitiveness Report”) when it comes to property rights and quality of land administration compared to Guatemala and Nicaragua. To exemplify how Honduras is better in terms of property, out of the 141 countries the World Economic Forum surveyed, Honduras ranked 80 out of 141 (“Global Competitiveness Report”) for quality of land administration. Honduras also has better property rights, which will give Walmart fewer barriers when building a distribution center.



ECONOMY

When deciding which country to build a distribution center in, the economy of the host country is an important factor. Factors like GDP, inflation, and trade freedom greatly impact the desirability of a potential business environment. That being said, economy is not the most important factor because, Walmart as a large business, is stable enough to overcome less than perfect elements in weaker economies. Furthermore, like many of the other categories, Guatemala, Honduras, and Nicaragua do not vary drastically on the various measures of economy, government business regulation, and currency considered. For example, the Economic Freedom Scores for each country, generated by the Heritage Foundation, an organization dedicated to international relations and foreign policy, are all roughly parallel, coming in at 62.6, 60.2, and 57.7 respectively on a 100 point scale (“Country Rankings”). The Economic Freedom Scores serve as the main basis for determining the attractiveness of the economy for each country. This score takes into account many factors, including rankings, GDP, various growth rates, unemployment, inflation, foreign direct investment, trade freedom, and business freedom.

Initially, Guatemala appeared to be the most attractive country. First, the nation’s Economic Freedom Score is the highest at 62.6. In addition, Guatemala features the highest world/regional ranks, GDP, and trade freedom scores. On the other hand, the country also claims the lowest growth rates and business freedom scores between the three countries (“Country Rankings”).

Honduras finds itself a close second behind Guatemala in almost every category. The few exceptions include the country’s hold on high levels of foreign direct investment inflow and business freedom scores. Alternatively, Honduras is experiencing the highest unemployment rates and lowest GDP per capita of the three countries investigated (“Country Rankings”).

Nicaragua consistently ranks the lowest of the countries, including rankings, population, GDP, FDI inflow, and trade freedom. The outliers here reside in Nicaragua’s high growth rates and moderately lower inflation rates (“Country Rankings”).

	GUATEMALA	HONDURAS	NICARAGUA
ECONOMIC FREEDOM SCORE	62.6	60.2	57.7
WORLD RANK	77	93	107
REGIONAL RANK	16	20	21
POPULATION	16.9 MILLION	8.3 MILLION	6.2 MILLION
GDP (PPP)	\$137.8 BILLION	\$42.6 BILLION	\$36.4 BILLION
GROWTH	2.80%	4.80%	4.90%
5-YR. COMPOUND ANNU. GROWTH	3.60%	3.60%	4.80%
PER CAPITA	\$8,145	\$5,562	\$5,849
UNEMPLOYMENT	2.70%	4.50%	4.40%
INFLATION	4.40%	3.90%	3.90%
FDI INFLOW	\$1.1 BILLION	\$1.2 BILLION	\$896.6 MILLION
TRADE FREEDOM SCORE	82.2	79.4	76
BUSINESS FREEDOM SCORE	53.6	56.9	56
LABOR FREEDOM SCORE	48.7	32	55.8
MONETARY FREEDOM SCORE	77	73	72.7

SOURCE: HERITAGE, 2019 INDEX OF ECONOMIC FREEDOM

In addition to the factors composing the Economic Freedom Scores, other factors were studied as well, including cost of labor, government transparency as an indicator for ease of doing business, and currency stability.

Guatemala has the highest cost of labor, followed by Honduras, and then Nicaragua. Additionally, according to the Transparency International's Corruption Perceptions Index, Guatemala ranks 144th out of 180, Honduras ranks 132nd, and Nicaragua ranks 152nd (Transparency International). Furthermore, in terms of purchasing power, each country's currency has been consistent with the U.S. dollar in the past five years ("XE Currency Charts...").

Because the gap between Guatemala and Honduras in the economic freedom scores is so small (2.4), it is believed that Honduras' higher or equal performance in the three additional categories makes up for any point differential. As such, it is the opinion of the authors that Guatemala and Honduras are equally desirable in terms of economic performance. The points used for weighing the economic criteria will remain the point equivalent of the Economic Freedom Scores, however with the understanding that Honduras is as viable an option as Guatemala.

SOCIAL STABILITY

CRIME RATES

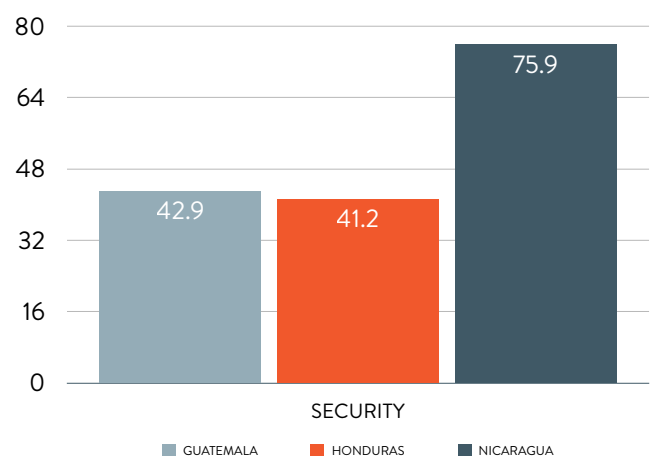
Crime and security are very important factors to be considered when deciding where to place a distribution center. Criminal activity can put employees' lives at risk which opens Walmart up to lawsuits and possible financial loss. There are also the risks of organized crime jeopardizing inventory from trucks and even the distribution center itself. We used information from the Global Competitiveness Report to decide the scores for crime and security which we then backed against our own research to verify the placement.

SECURITY

Guatemala scored 42.9 as its level of security and is ranked 134 out of the 141 ("Global Competitiveness Report") countries listed in the Global Competitiveness Report. Guatemala might not be the most ideal place for Walmart to invest in a distribution center due to its political and security instabilities (Hite, Katherine, and Mark Ungar).

Honduras security level scored at 41.2 and is ranked 137 out of 141 ("Global Competitiveness Report"). Although Honduras is not particularly considered a safe country in terms of security, crime is mostly localized in big cities, and it lacks the amount of political strife that Guatemala contains making it more attractive as a location for the distribution center. When factoring in these additions, Honduras can be seen as a better option for Walmart, if a more rural location were chosen ("Honduras Organized Crime News").

SECURITY COMPETITIVENESS SCORES



Nicaragua scored the best coming in at 75.9 and is ranked 65 out of 141 in terms of security (“Global Competitiveness Report”). If solely looking at the criminal elements, Nicaragua would be seen as the best and safest option for a distribution center, but upon recalling issues mentioned earlier concerning the political instability, riots, and corruption, Nicaragua becomes a less attractive option (“U.S. Relations With Nicaragua - United States Department of State.”).

None of the countries are the safest place, but we can reasonably say that if the criminal activities, anti-US sentiments, and corruption are all factored in together, Honduras is the best option. Guatemala has a more organized and widespread crime element, while the criminal elements in Honduras are more decentralized and easier to avoid. Nicaragua may be safer when it comes to crime, but riots and corruption and anti-American sentiments make placing a distribution center a risky venture, while in Honduras, American sentiments are usually positive and politics are generally non-violent. This is why Honduras would be the best option when considering the security.

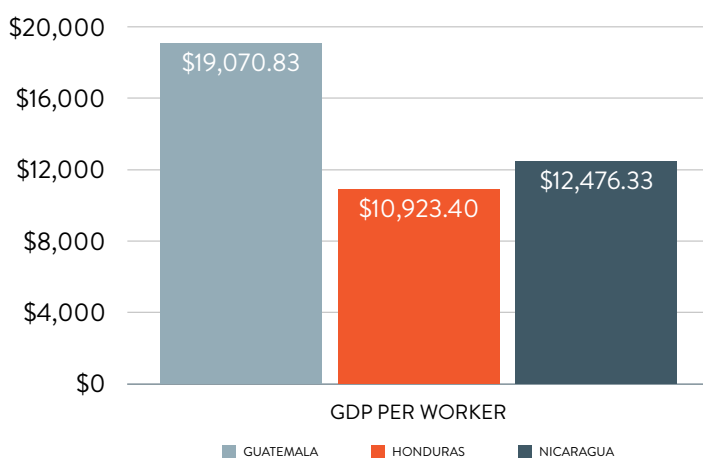
WORKFORCE PRODUCTIVITY

Workforce productivity is an important part of economic growth and competitiveness within an economy. We evaluated the workforce productivity of the three countries mainly by two statistics, GDP per worker and Human Development Index (HDI).

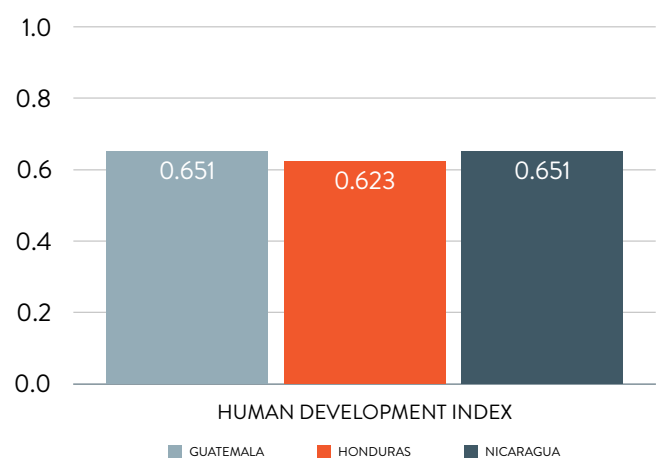
We divided the countries’ total volume of output by the number of labor to show the efficiency and quality of the labor force in the three countries. Guatemala, being the top of the three countries, has a GDP per worker of \$19,070.83 in 2019. Second, Nicaragua with a GDP of \$12,476.33 per worker in 2019. And lastly, Honduras with a GDP of \$10,923.40 per worker in 2019 according to the Labour productivity report on International Labour Organization Statistic (“Labour Productivity”).

The Human Development Index (HDI) was created by the United Nations Development Programme to examine the capability of the people in a country. It is a summary measure of average achievement in key dimensions of human development, including life expectancy, health, knowledge, and standard of living. Guatemala and Nicaragua both have an HDI of 0.651, while Honduras has a lower HDI of 0.623 (“Human Development Index”).

GDP PER WORKER



HUMAN DEVELOPMENT INDEX



CONCLUSION

Guatemala, Honduras, and Nicaragua each have their own distinct strengths and weaknesses. When compared on government stability, infrastructure, economic state, and social stability these three countries do not differ drastically.

Honduras has the most stable government, with relatively few coups and good relations with the U.S. Although the road infrastructure in Honduras is not the best, its performance averages out over all categories of distribution method (i.e. seaports, airports, roads), which would allow for greater flexibility. Honduras is also centrally located, which would provide easy access to all of Central America, including El Salvador and Costa Rica. Compared to the other countries, Honduras performs worse in social stability due to a high homicide rate and economic factors, like high foreign direct investment inflow, suggest a comparable if not favorable environment for establishing another business unit in Central America.

Guatemala has a slightly less stable government than Honduras due to a recent coup, however despite subsequent tensions the country still maintains a mostly positive relationship with the U.S. Guatemala has the best infrastructure in everything, except roads, which is Walmart's most important and currently relied upon method. Guatemala contains the most Walmart-owned stores, but is also the furthest north. Due to a high GDP per worker and other factors, Guatemala has the highest social stability. Additionally, the country's economic performance indicates on average the strongest economic freedom of the three.

Nicaragua has the least stable government with an anti-American socialist group currently in charge limiting freedom. The country has the best road system of all the countries but suffers greatly in all other areas of infrastructure. It is the furthest south of the three and contains the fewest number of Walmart-owned stores. Nicaragua has the second best social stability due to low levels of crime and a moderate GDP per laborer. Nicaragua boasts the highest growth rates compared to Honduras and Guatemala, however, all other evidence indicates the nation has the least amount of economic freedom.

With all of this information in mind, marginally higher performances, averages, and critical judgement were used to arrive at a conclusion. Honduras does not perform the best in every criteria, in fact, in some like social stability it actually performs the worst. However, by taking all factors into consideration, choosing Honduras as the sight of Walmart's next distribution center in Central America offers the least amount of risk and highest composite benefits.

CRITERIA	WEIGHT	GUATEMALA	HONDURAS	NICARAGUA
GOVERNMENT STABILITY	25%	42.4	43.8	41.9
INFRASTRUCTURE	25%	55.9	57.4	55.6
LOCATION	20%	55.0	65.0	60.0
ECONOMY	20%	62.6	60.2	57.7
SOCIAL STABILITY	10%	71.3	52.1	66.2
TOTAL	100%	55.225	55.546	54.531

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