

# El Salvador Municipal Competitiveness Index 2011

Measuring Local Economic Governance to Create A Better Business Environment



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# EXECUTIVE SUMMARY

The Municipal Competitiveness Index (MCI) is one component of the U.S. Agency for International Development's (USAID) Municipal Competitiveness Project (MCP) in El Salvador. The core methodology used to develop the MCI was employed previously in Asia, where it was proven as a valuable way to promote dialogue and healthy competition regarding subnational private sector development. RTI International (RTI) and the Escuela Superior de Economía y Negocios (ESEN) tailored the methodology to the El Salvador context in 2009 for the Municipal Competitiveness Index project, also supported by USAID.

The 2011 MCI is the second implementation of the methodology. As such, it enables the assessment of change relative to 2009 in the country's 100 most populous municipalities. In addition to these 100, the 2011 study included 8 new municipalities, as they are a part of the greater MCP initiative. The new municipalities are Alegria, Caluco, Comasagua, Nueva Guadalupe, San Bartolomé Perulapía, Santa Cruz Michapa, Santa María Ostuma, and Talnique. The results for these eight municipalities are presented separately in this report; the 2011 data provides only baseline information on their performance and therefore cannot be ranked.

This report serves as a user-friendly presentation of the results for the general public. **Table 3** at the end of this report functions as an easy reference, listing the scores for the overall index and sub-indices for all 108 municipalities in alphabetical order. A more extensive report containing the full analysis of the data, as well as an appendix detailing the MCI methodology will be posted on the MCI Web site at http://www.municipalindexelsalvador or http://www.indicemunicipalelsalvador.com. The Web site is bilingual and serves as a center of information for all details on the MCI, including the data, survey forms, presentations, and all news on the tool.

Following the first dissemination event in San Salvador, the MCI team will continue to disseminate the results of the project through presentations to key stakeholders in each of the country's 14 departments, including the mayors and other local officials, members of the business community, and other interested organizations. The goal of the MCI is to provide an opening for continued constructive dialogues between the public and private sectors at the local level to improve the business environment and advance the decentralization agenda in El Salvador.

Finally, we would like to thank all members of the MCI team for their hard work, the numerous stakeholders from both the public and private sectors who informed the survey design, and the thousands of respondents—business owners, mayors, and municipal officials—who took the time to be interviewed about their local business environment and municipal regulations.

### EL SALVADOR MUNICIPAL COMPETITIVENESS INDEX 2011

The U.S. Agency for International Development (USAID), through the Municipal Competitiveness Project (MCP), supports a research effort called the Municipal Competitiveness Index (MCI). The MCI is a tool used to measure the business environment at the local level in El Salvador. The business environment is the degree up to which municipalities generate, nurture, promote, and maintain conditions to attract the private investment required to reach sustainable levels of economic growth. Economic growth means increased levels of local employment, taxes, and rates which in turn enable the provision of good quality municipal services and the enhancement of residents' well being<sup>1</sup>.

The MCI measures the following nine characteristics of the local business environment:

- **Transparency**: Degree of openness to provide access to information and the predictability of changes to regulations affecting businesses in the municipality.
- **Municipal Services**: Quality of services the municipality provides to the private sector.
- **Proactivity**: Level of dynamism of a municipal government in developing and promoting initiatives aimed at attracting investment and improving local business conditions.
- **Informal Payments**: Magnitude, incidence and costs of informal payments required to start and operate a business.
- **Public Safety**: Impact of crime on business owners and municipalities' ability to prevent and control crime.
- **Time to Compliance**: Frequency of inspections in each municipality and the degree to which they are carried out in an appropriate manner.
- **Rates and Taxes**: Amount of local taxes and other charges required to operate a business.
- Entry Costs: Time costs and easy of registering and beginning operations of a business.
- Municipal Regulations: Number of regulations imposed on business operations.

The MCI assesses the business environment through face-to-face surveys with business owners, mayors, and municipal officials, attempting to capture the actual experiences of privately owned businesses of all sizes, both formal and informal, provided they operate from a fixed location. Importantly, the MCI does not measure the total investment environment. Rather, it excludes initial structural conditions and resource endowments, such as population size, location, natural resources, and access to markets and skilled labor. This methodology allows us to rank municipalities on a level playing field, despite very different endowments and stages of development. The MCI focuses on aspects of the local economy over which municipal governments have equal control, providing information that is actionable by all local governments.

### 2011 MCI—The Second Round

The 2011 MCI is the second measurement of the local business environment in El Salvador. The first MCI was constructed in 2009, through the USAID-funded Municipal Competitiveness Index project, with the most populous 100 municipalities, which accounts for 81% of the population and 92% of businesses. The

<sup>&</sup>lt;sup>1</sup> Dixit, A., 2009, Governance Institutions and Economic Activity, *American Economic Review*, Vol. 99, No. 1, p. 5–24.

2011 MCI included the same 100 municipalities as 2009 but also added 8 new municipalities, because they are part of the greater USAID-funded MCP currently underway. The new municipalities are Alegria, Caluco, Comasagua, Nueva Guadalupe, Perulapía, San Bartolomé, Santa Cruz Michapa, Santa María Ostuma, and Talnique. Together, the new municipalities represent 1.3% and 0.4% of the country's total population and businesses, respectively.

The construction of the 2011 MCI took place during a period of difficult economic conditions and political change, following the election of a new government and the deepening of the global economic recession. The newly elected government has implemented an active policy of decentralization aimed at enhancing the role of municipal governments in key social and economic aspects of national life. Local governments have been encouraged to develop capabilities to improve the business climate to attract investment, increase employment, and achieve healthier finances.

As the second measurement of the business climate in El Salvador's municipalities, the 2011 MCI enables the assessment of change relative to 2009. Despite the relatively short period elapsed between 2009 and 2011, one can focus on changes in the MCI sub-indices to identify areas of real or potential improvement.

### 2011 MCI Overall Ranking

#### The 100 Municipalities Participating in Both the 2011 and 2009 Studies

The 2011 MCI used exactly the same data collection and data analysis methods employed in implementing the 2009 MCI, thus enabling the comparison of aggregate scores over time. In 2011, the MCI averaged 6.19, a score significantly greater by 0.4 points than the 5.80 average in the 2009 MCI. It is important to highlight that all 100 municipalities registered an improvement in the level of competitiveness as measured by the index. However, not all of the MCI sub-indices improved in 2011. **Table 1** shows that on average, the 100 municipalities included in both the 2009 and 2011 studies improved on the aspects of Time to Compliance (1.56 points), Rates and Taxes (1.06 points), Entry Costs (0.85 points), Public Safety (0.66 points), Municipal Services (0.54 points), and Transparency (0.15 points). On the other hand, there was a decline in the Informal Payments sub-index (0.55 points). The values of the Proactivity, and Municipal Regulations sub-indices did not change significantly in 2011 relative to 2009.

Results for the eight new municipalities included in the 2011 MCI are presented separately in **Table 2** on page 16, as the present exercise compares results with 2009 evaluations that are not available for the new municipalities. While the 2011 scores provide a similar measure of competitiveness for all 108 municipalities (shown in alphabetical order in **Table 3** on page 16), the inclusion of the new municipalities affects the overall rankings in a manner that does not accurately reflect the relative change in performance from the earlier MCI. Scores for the new municipalities will be consolidated into the rankings in the 2013 MCI.

	%		Indices		
	Contribution to Total MCI	2009	2011	Absolute Change	
Final MCI	100	5.80	6.20	0.40**	
Time to Compliance	10	4.97	6.53	1.56**	
Rates and Taxes	10	4.31	5.37	1.06**	
Entry Costs	5	8.23	9.08	0.85**	
Public Safety	10	6.66	7.33	0.66**	
Municipal Services	15	3.24	3.78	0.54**	
Transparency	15	5.68	5.83	0.15**	
Proactivity	15	5.55	5.50	-0.05	
Municipal Regulations	5	8.44	8.37	-0.07	
Informal Payments	15	8.11	7.55	-0.55**	

#### Table 1: Average Values, MCI, and Sub-indices, 2011

\*\* Significant at the 1% level.

The percentages represent the weight that each sub-index has in forming the final MCI, both in 2009 and 2011. (Technical details are provided at http://www.municipalindexelsalvador.com/gal\_documentos/MCI-Full-Appendix.pdf.)

These results suggest that despite the general increase in the overall MCI observed in 2011, opportunities for improvement continue to exist across key areas of municipal competitiveness related to Proactivity, Informal Payments, and Municipal Regulations.

The 100 municipalities were classified into five groups with regard to their performance on the index: (1) "Excellent," (2) "High," (3) "Average," (4) "Low," and (5) "Very Low." In determining the groups, the breakpoints used in 2009—adjusted for the average change in the MCI—were maintained in 2011.

The final 2011 MCI ranking for the 100 municipalities also included in the 2009 MCI is shown in **Figure 1** on the next page. Antiguo Cuscatlán obtained the highest MCI score in 2011 (8.01), maintaining the top position that it achieved in 2009. La Libertad (7.78) and Texistepeque (7.60) also held on to the second and third positions, respectively, in 2011, which they previously held in 2009. Santa Tecla (7.48) moved from seventh in 2009 to fourth in 2011, while Tepecoyo (7.42) moved from sixth in 2009 to fifth in 2009. These five municipalities are classified as having an "Excellent" level of performance in 2011. The 2009 MCI also noted five "Excellent" performing municipalities, though the composition changed.

The number of local governments classified in the "Average" performance group declined from 44 in 2009 to 41 in 2011, whereas the number of municipalities in the "Low" performance group increased from 2 in 2009 to 5 in 2011. With the exception of the lower end of the MCI rankings, the performance groups in 2011 were similar to those in 2009.



#### Figure 1: El Salvador MCI 2011

#### **Sub-index Results**

#### Transparency

**Figure 2** shows municipal rankings for the Transparency sub-index. This sub-index had an average value of 5.82, with Tepecoyo recording the highest value at 8.01. In 2011, the following municipalities were the most improved performers for the Transparency sub-index: Armenia, Ayutuxtepeque, Lolotique, San Miguel, San Luis de La Herradura, Santa Tecla, and Soyapango. Transparency in government results in more and better information for businesses, allowing them to more accurately plan and increase their chances for success and growth.

#### Municipal Services

**Figure 3** shows municipal rankings for the Municipal Services sub-index. This sub-index had an average value of 3.77, with Antiguo Cuscatlán recording the highest value at 10. Metapan was the most improved performer for the Municipal Services sub-index. In many studies, public services are estimated to exert a positive and statistically significant effect on economic growth<sup>2</sup>. Better quality municipal services can generate conditions to attract investment that results in more employment.

#### Proactivity

**Figure 4** shows municipal rankings for the Proactivity sub-index. This sub-index had an average value of 5.48, with La Libertad recording the highest value at 8.40. Chalatenango was the most improved performer for the Proactivity sub-index. Overall, this sub-index did not record a significant improvement in 2011 relative to its average value in 2009. Among many factors, proactivity pertains to a local government's capacity to face and solve situations, using local resources without relying on the central government, and to engage the business community in planning and budgeting activities relating to the private sector. This is an area offering El Salvador's municipalities broad opportunities for improvement.

#### Informal Payments

**Figure 5** shows municipal rankings for the Informal Payments sub-index. This sub-index had an average value of 7.54, with Jujutla, San Salvador, and Sonzacate recording the highest value at 10. The following municipalities were the most improved performers for the Informal Payments sub-index: Jujutla, Metapan, Santa Rosa de Lima, San Salvador, and Sonzacate. The average value of the Informal Payments sub-index decreased in 2011 relative to 2009 (refer to **Table 1**). A total of 90 of 100 municipalities recorded a decrease for this sub-index, which suggests that informal business-related practices are more frequent in most Salvadoran municipalities. Corruption increases the cost of doing business, reduces the confidence in local governments, reduces citizen participation, and depending on its level, may have negative effects on investment and employment.

<sup>&</sup>lt;sup>2</sup> Fisher, R.C., 1997, The Effects of State and Local Public Services on Economic Development, *New England Economic Review*, March/April, p. 53-82.



Figure 2: Transparency Sub-index 2011



Figure 3: Municipal Services Sub-index 2011







Figure 5: Informal Payments Sub-index 2011

#### Public Safety

**Figure 6** shows municipal rankings for the Public Safety sub-index. This sub-index had an average value of 7.33, with Conchagua recording the highest value at 10. La Libertad was the most improved performer for the Public Safety sub-index. This is an area where many municipalities have implemented initiatives aimed at reducing the prevalence and incidence of crimes against local businesses and citizens. In general, local businesses have improved their perceptions of the local government's performance in this area.

#### Time to Compliance

**Figure 7** shows municipal rankings for the Time to Compliance sub-index. This sub-index had an average value of 6.53, with Ilobasco recording the highest value at 7.85. In 2011, most municipalities recorded significant increases for the Time to Compliance sub-index relative to 2009. This was the sub-index with the most improvement in 2011.

#### Rates and Taxes

**Figure 8** shows municipal rankings for the Rates and Taxes sub-index. This sub-index had an average value of 5.35, with Santa Ana recording the highest value at 8.89. Most municipalities had significant increases for the Rates and Taxes sub-index relative to 2009. This is an important finding, because it suggests that even during a time of economic downturn, local governments have managed to improve the quality of municipal services.

#### Entry Costs

**Figure 9** shows municipal rankings for the Entry Costs sub-index. This sub-index had an average value of 9.08, with San Miguel recording the highest value at 9.79. Tacuba was the most improved performer for the Entry Costs sub-index. There has been an improvement in this sub-index from the 8.23 average registered in 2009, indicating an improvement in conditions for processing business permits and start-up requirements.

#### Municipal Regulations

**Figure 10** shows municipal rankings for the Municipal Regulations sub-index. This sub-index had an average value of 8.37, with Chinameca, Cuscatancingo, El Paisnal, Jujutla, Jucuarán Metapán, San Juan Nonualco, Sensuntepeque, Sonsonate, and Texistepeque recording the highest value at 10. The following municipalities were the most improved performers for the Municipal Regulations sub-index: Antiguo Cuscatlan, Conchagua, La Libertad, Olocuilta, San Antonio del Monte, and Santa Tecla.

















#### Changes Between 2009 and 2011

On the overall MCI, all 100 municipalities improved their MCI scores compared to 2009 by an average 0.4 points or 7%. This result means that despite the economic crisis strongly impacting the country in 2010, local governments were still able to promote better business environments in 2011.

However, this improvement was not uniform across municipalities. The municipalities of Jujutla and Santa Tecla experienced increases of 15.6% and 12.9% compared to their MCI scores in 2009, respectively. On the other hand, Antiguo Cuscatlán, El Carmen, and San Luis Talpa increased their MCI scores by less than 1% relative to 2009. Overall, 53 municipalities recorded increases above the 7% average.

#### **MCI Rankings for Eight New Municipalities**

**Table 2** shows the scores overall MCI and sub indices for the eight municipalities that participated in the study for the first time in 2011.

Municipality Ranking	MCI	Transparency	Municipal Services	Proactivity	Informal Payments	Public Safety	Time to Compliance	Rates and Taxes	Entry Costs	Municipal Regulations
COMASAGUA	5.59	5.78	3.76	4.88	7.23	6.94	5.02	4.13	8.91	5.65
SANTA MARIA OSTUMA	5.53	5.25	2.41	4.86	7.37	8.36	4.32	6.06	8.34	5.18
SANTA CRUZ MICHAPA	5.39	4.31	4.64	2.89	7.26	6.37	6.00	4.89	9.73	6.24
TALNIQUE	5.37	4.94	3.44	5.12	7.26	6.87	5.54	3.76	7.30	5.53
CALUCO	5.16	4.48	2.96	2.87	6.65	7.98	7.51	3.19	7.64	7.37
ALEGRIA	5.13	4.39	3.92	3.59	7.84	7.61	3.20	4.11	8.43	5.18
NUEVA GUADALUPE	4.89	4.71	2.19	4.34	7.27	5.83	6.17	4.04	8.07	2.15
SAN BARTOLOME PERULAPIA	4.48	4.39	2.49	3.90	7.39	5.65	3.96	1.08	9.36	4.32
Average	5.73	5.73	3.66	5.37	7.32	6.72	4.71	5.55	9.11	8.23

#### Table 2: MCI and Sub-indices in Eight New Municipalities

Comasagua recorded the highest value for the overall MCI, with a score of 5.59. This municipality also had the highest value for the Transparency sub-index, 5.78. Santa María Ostuma recorded the highest values for Public Safety and Rates and Taxes. Santa Cruz Michapa ranked first in Municipal Services; Talnique ranked first in Proactivity; and Alegría had the highest score for Informal Payments.

**Table 3**, on the next page, consolidates the scores for the new 8 municipalities together with the original 100, presented in alphabetical order by municipality name. They are highlighted in dark green and a star is shown in place of their rank, as they were not included in the ranking exercise this year.

#### Table 3: MCI: Overview 2011

MCI Ranking	Municipality	MCI	Transparency	Municipal Services	Proactivity	Informal Payments	Public Safety	Time to Compliance	Rates and Taxes	Entry Costs	Municipal Regulations
88	Acajutla	5.49	4.52	3.54	4.42	6.13	7.08	7.12	5.57	8.75	5.59
69	Aguilares	5.86	5.43	4.50	5.19	7.13	5.89	6.93	5.17	8.42	6.09
91	Ahuachapan	5.35	4.90	2.31	4.07	6.61	7.45	6.60	3.83	9.70	7.91
*	Alegria	5.13	4.39	3.92	3.59	7.84	7.61	3.20	4.11	8.43	5.18
51	Anamoros	6.16	5.05	3.10	5.81	7.82	8.35	6.93	4.63	9.49	8.58
1	Antiguo Cuscatlan	8.01	7.33	10.00	6.27	9.20	9.42	5.94	5.72	9.73	9.95
47	Apastepeque	6.22	5.75	4.96	3.59	7.66	7.58	7.19	5.94	8.99	8.04
40	Арора	6.32	7.01	4.39	7.75	7.03	5.65	4.19	6.14	9.19	6.82
68	Armenia	5.90	6.34	3.65	5.82	4.77	7.74	6.84	4.43	9.44	8.84
49	Atiquizaya	6.19	4.48	4.07	5.50	8.19	7.86	6.63	5.15	7.98	9.90
36	Ayutuxtepeque	6.39	7.49	3.67	6.74	7.41	6.55	6.70	4.24	9.01	7.94
82	Berlin	5.58	5.41	2.75	4.82	6.57	7.45	6.23	3.68	8.96	9.35
*	Caluco	5.16	4.48	2.96	2.87	6.65	7.98	7.51	3.19	7.64	7.37
60	Candelaria De La Frontera	6.05	6.12	4.60	3.66	7.01	6.60	5.95	7.63	9.63	6.80
13	Chalatenango	6.88	6.88	3.56	8.29	7.44	8.67	7.49	5.35	9.68	6.34
25	Chalchuapa	6.57	6.61	5.14	5.57	8.48	6.46	7.75	4.57	6.76	9.69
90	Chinameca	5.41	4.80	2.51	4.10	5.20	7.56	7.28	4.45	9.73	10.00
48	Chirilagua	6.19	5.91	4.74	3.13	6.82	8.49	7.78	6.03	9.20	8.28
94	Ciudad Arce	5.27	4.87	2.58	5.07	6.05	6.20	6.35	4.66	8.80	6.57
86	Ciudad Barrios	5.51	4.88	2.14	4.76	8.37	6.31	6.16	3.36	9.69	8.45
87	Coatepeque	5.50	3.98	3.53	4.64	6.05	7.10	7.17	4.80	9.66	7.68
31	Cojutepeque	6.50	5.73	3.42	4.35	9.39	7.18	7.61	6.62	9.77	8.76
56	Colon	6.10	5.21	3.41	6.55	7.72	6.16	6.63	4.54	8.96	9.65
*	Comasagua	5.59	5.78	3.76	4.88	7.23	6.94	5.02	4.13	8.91	5.65
6	Conchagua	7.29	7.82	6.66	7.42	6.97	10.00	7.63	4.74	9.73	4.75
35	Corinto	6.42	6.62	3.59	5.20	8.75	7.27	6.53	5.02	9.70	8.67
18	Cuscatancingo	6.71	6.80	3.69	7.08	7.74	6.32	5.98	6.99	9.62	10.00
62	Delgado	6.04	5.86	3.15	5.74	6.07	7.54	6.71	6.97	8.69	7.21
22	El Carmen	6.62	5.37	5.07	5.71	9.02	8.65	4.17	6.78	8.64	9.06
92	El Congo	5.30	4.38	2.69	4.11	5.96	7.09	6.98	3.64	9.59	9.61
41	El Paisnal	6.31	6.22	3.41	5.72	8.88	7.44	6.83	5.46	4.13	10.00

MCI Ranking	Municipality	MCI	Transparency	Municipal Services	Proactivity	Informal Payments	Public Safety	Time to Compliance	Rates and Taxes	Entry Costs	Municipal Regulations
9	El Rosario	7.06	6.66	4.19	7.59	8.97	7.23	6.78	6.55	8.14	9.67
16	El Transito	6.74	5.99	3.70	7.12	8.26	8.44	7.25	6.21	9.23	6.64
53	Guaymango	6.11	5.92	2.94	5.17	7.04	9.31	7.08	4.48	8.96	8.33
30	Guazapa	6.50	6.64	4.96	5.11	7.57	6.72	7.39	5.49	9.27	8.78
45	Huizucar	6.26	6.69	4.37	3.88	8.92	7.94	4.03	6.52	8.78	7.78
44	llobasco	6.26	5.30	4.14	5.04	8.33	6.53	7.85	5.23	9.72	7.80
34	llopango	6.43	7.24	3.56	6.35	4.94	8.11	7.23	6.44	9.72	9.08
81	Izalco	5.59	4.42	1.87	3.12	8.21	6.91	6.76	6.89	8.73	9.10
50	Jiquilisco	6.19	5.80	3.41	5.70	6.84	8.66	7.01	5.73	8.96	6.73
37	Juayua	6.37	5.34	5.73	4.42	9.97	6.94	6.23	4.02	8.42	8.17
85	Jucuapa	5.56	3.69	1.78	4.44	7.54	7.01	6.77	6.34	9.32	9.21
84	Jucuaran	5.57	4.80	3.22	5.63	6.85	8.43	4.25	2.54	9.46	10.00
11	Jujutla	7.00	6.45	4.31	4.82	10.00	8.59	7.32	6.09	9.33	10.00
2	La Libertad	7.78	6.77	6.83	8.40	9.07	8.25	6.08	7.32	9.28	9.72
97	La Union	5.09	5.22	2.35	4.41	6.93	6.34	4.11	2.64	9.69	9.15
72	Lislique	5.79	5.55	2.97	4.47	8.18	6.50	6.72	4.80	8.50	7.81
54	Lolotique	6.11	5.89	3.18	5.76	9.06	7.07	4.13	4.73	9.67	8.96
20	Mejicanos	6.64	5.92	3.65	6.99	7.89	7.85	7.15	6.12	9.44	7.71
26	Metapan	6.54	5.24	4.91	5.79	8.82	7.67	7.04	4.32	8.46	10.00
12	Moncagua	6.92	6.75	5.62	5.45	8.42	7.96	7.11	6.87	8.54	7.31
17	Nahuizalco	6.71	5.23	4.80	5.87	8.63	7.96	7.71	5.72	9.75	8.12
63	Nejapa	6.01	5.71	3.76	5.55	7.46	7.00	6.40	4.77	9.34	7.06
73	Nueva Concepcion	5.75	4.21	3.16	5.52	6.37	7.31	7.04	6.38	9.12	6.68
*	Nueva Guadalupe	4.89	4.71	2.19	4.34	7.27	5.83	6.17	4.04	8.07	2.15
58	Olocuilta	6.07	5.27	3.63	5.92	7.02	6.38	6.93	5.69	9.06	8.82
96	Panchimalco	5.10	4.32	2.12	4.44	6.52	5.34	6.24	4.45	9.77	8.01
15	Pasaquina	6.76	6.56	5.76	5.06	7.42	8.30	6.73	7.06	9.17	7.52
42	Puerto El Triunfo	6.30	7.27	3.76	4.24	8.91	5.24	5.90	6.66	9.71	8.21
14	Quezaltepeque	6.80	5.91	3.64	6.73	8.12	7.79	6.94	7.70	8.26	9.67
61	San Alejo	6.04	4.63	3.07	6.89	6.09	8.36	6.50	5.77	9.35	8.12
28	San Antonio Del Monte	6.53	7.52	3.60	6.08	7.70	6.46	7.38	5.03	8.19	9.94
*	San Bartolome Perulapia	4.48	4.39	2.49	3.90	7.39	5.65	3.96	1.08	9.36	4.32
10	San Francisco Gotera	7.03	7.34	3.11	7.62	8.39	8.44	7.51	5.77	9.61	8.21

MCI Ranking	Municipality	MCI	Transparency	Municipal Services	Proactivity	Informal Payments	Public Safety	Time to Compliance	Rates and Taxes	Entry Costs	Municipal Regulations
95	San Francisco Menendez	5.26	5.13	2.50	3.90	5.43	8.45	7.36	4.30	8.92	5.08
67	San Jose Villanueva	5.94	5.63	2.37	5.68	7.13	7.42	6.61	5.41	8.53	9.01
70	San Juan Nonualco	5.84	5.49	2.21	5.35	7.56	7.83	6.37	3.69	9.25	10.00
38	San Juan Opico	6.33	6.81	3.19	4.82	9.16	6.12	6.04	5.49	9.72	9.72
27	San Julian	6.53	7.53	2.49	6.43	8.73	7.67	6.26	4.28	9.25	9.39
79	San Luis De La Herradura	5.68	6.11	1.80	6.14	4.99	8.55	6.66	5.31	6.17	9.30
93	San Luis Talpa	5.29	5.35	1.57	4.16	8.86	6.55	4.08	3.30	9.19	8.86
66	San Marcos	5.94	5.93	2.54	5.61	6.61	7.90	6.16	4.92	9.23	9.63
71	San Martin	5.81	6.65	2.79	6.70	6.86	4.07	7.44	4.39	9.56	5.93
59	San Miguel	6.05	7.35	4.04	5.16	6.48	5.47	6.94	5.40	9.79	6.55
8	San Pablo Tacachico	7.09	6.46	5.52	6.64	9.18	8.83	6.39	5.15	9.04	8.73
7	San Pedro Masahuat	7.29	7.20	5.08	8.02	8.36	8.47	6.56	6.08	8.85	8.76
80	San Pedro Perulapan	5.68	5.13	2.74	3.41	6.40	6.07	7.37	8.77	9.70	6.37
39	San Rafael Cedros	6.33	6.15	3.12	4.91	8.70	7.18	7.04	5.96	8.79	8.77
21	San Salvador	6.64	6.27	4.46	6.41	10.00	6.69	7.23	3.86	9.26	6.47
83	San Sebastian	5.58	5.18	2.44	3.66	8.79	5.58	6.95	5.03	9.14	7.22
77	San Sebastian Salitrillo	5.70	5.46	3.03	5.41	6.29	5.73	6.49	6.06	8.22	8.70
89	San Vicente	5.42	4.66	2.36	6.47	5.72	5.15	5.93	5.23	8.84	9.41
33	Santa Ana	6.48	3.70	3.35	7.42	8.15	5.80	6.91	8.89	9.44	9.00
*	Santa Cruz Michapa	5.39	4.31	4.64	2.89	7.26	6.37	6.00	4.89	9.73	6.24
55	Santa Elena	6.10	5.46	3.45	4.48	9.09	6.16	6.58	5.32	9.76	8.75
*	Santa Maria Ostuma	5.53	5.25	2.41	4.86	7.37	8.36	4.32	6.06	8.34	5.18
23	Santa Rosa De Lima	6.59	5.90	6.97	4.33	7.36	8.53	6.79	4.47	9.75	8.75
4	Santa Tecla	7.48	7.45	5.97	6.48	8.86	8.59	7.84	6.14	8.68	9.47
52	Santiago De Maria	6.15	4.33	3.63	7.66	7.97	7.76	6.14	3.81	9.29	7.45
76	Santiago Nonualco	5.71	5.41	3.75	5.41	5.50	6.83	7.32	4.32	9.43	7.53
19	Santiago Texacuangos	6.67	7.07	5.10	4.21	8.19	6.75	7.34	6.52	9.16	9.42
98	Santo Tomas	5.02	5.59	3.10	3.23	6.24	4.34	7.54	3.77	6.07	8.55
64	Sensuntepeque	6.01	5.07	4.77	4.72	6.61	6.40	6.98	5.09	9.68	10.00
74	Sonsonate	5.74	6.40	3.21	4.94	5.54	9.12	4.26	4.00	9.71	10.00
65	Sonzacate	5.97	3.90	1.80	4.67	10.00	7.28	6.97	5.29	9.63	9.57
24	Soyapango	6.57	6.97	3.32	7.08	7.50	6.78	6.56	5.41	9.65	9.74
32	Suchitoto	6.48	5.40	7.34	4.97	7.31	9.05	3.40	5.58	9.50	8.90

MCI Ranking	Municipality	MCI	Transparency	Municipal Services	Proactivity	Informal Payments	Public Safety	Time to Compliance	Rates and Taxes	Entry Costs	Municipal Regulations
78	Tacuba	5.70	5.13	2.73	4.96	7.05	7.51	3.94	7.16	9.34	7.77
*	Talnique	5.37	4.94	3.44	5.12	7.26	6.87	5.54	3.76	7.30	5.53
46	Tamanique	6.22	7.05	4.11	6.21	6.60	8.26	4.04	5.05	9.64	8.19
43	Tecoluca	6.26	5.42	5.11	6.64	6.56	7.86	6.36	4.03	8.32	9.25
29	Tejutla	6.52	5.73	3.52	5.57	8.43	8.85	6.59	5.49	9.48	9.27
5	Тересоуо	7.42	8.01	5.89	7.25	9.39	8.09	5.73	7.61	9.09	4.90
3	Texistepeque	7.60	7.84	4.82	7.07	8.83	9.86	7.44	6.05	9.68	10.00
75	Tonacatepeque	5.72	5.37	2.49	3.15	8.02	7.60	7.25	5.18	9.58	7.67
100	Usulutan	4.94	4.50	2.89	4.29	3.88	6.34	5.67	5.40	9.57	7.70
99	Zacatecoluca	4.95	4.01	2.77	4.43	5.18	6.25	7.07	3.96	9.64	5.74
57	Zaragoza	6.09	5.95	3.52	5.66	7.94	7.79	6.60	3.61	8.25	8.32

### **Methodological Summary**

The computation of the 2011 MCI followed the same methodology of the 2009 MCI. The indicators used to construct the MCI and its sub-indices were computed from data collected in the 108 municipalities by surveying municipal officials and a random sample of businesses operating from a fixed location in each municipality. The sample designs for the municipal and business surveys were the same as in 2009<sup>3</sup>.

During the collection of municipal data, in the municipality of Santo Tomas, the local council refused to participate in the study and did not provide data for the municipal survey. As a result, Santo Tomas was assigned with the lowest value for the municipal indicators used to construct the MCI and its sub-indices.

The need to assess change in the MCI and its sub-indices for the 100 municipalities in both the 2009 and 2011 studies required the introduction of a panel scheme in the 2011 data collection. It also required an increase in the sample size for the San Salvador Metropolitan Area and the municipalities of Santa Ana and San Miguel, which have the greatest concentrated volume of economic activity. A total of 4,550 businesses were selected to participate in the study, with 957 corresponding to establishments visited in 2009. The corresponding information allowed for the construction of a panel dataset that facilitated direct comparison over time, as experienced by the same businesses.

Data were collected from April 11 to June 11, 2011 by a team of 15 interviewers organized into 3 groups, each under the leadership of one field supervisor. The three supervisors reported directly to a Head of Operations<sup>4</sup>. An additional group of four interviewers and one supervisor collected data on businesses that had changed their locations to different municipalities than those in 2009. Field staff were trained over a two-week period to ensure their full understanding of the survey questions and the structure of the survey form, the cartography, the field procedures for the selection of establishments, and the formation of the panel survey.

Quality control procedures were strengthened to ensure the integrity of the data collected by requiring supervisors to conduct validation interviews with businesses already visited by the staff under their leadership. The Head of Operations conducted quality checks on a 10% sample of business survey forms and on a 20% sample of the panel survey forms.

SPSS Data Entry Builder<sup>TM</sup> was used to develop a customized data entry and editing program to capture and manage the data from the survey forms. Clean files were produced in SPSS format.

A detailed technical appendix will accompany the final full report and will discuss the details of the procedures used to construct and weight the sub-indices and to compute the final MCI.

<sup>&</sup>lt;sup>3</sup> Refer to the 2009 MCI report.

<sup>&</sup>lt;sup>4</sup> Field staff was made of the six supervisors and the most experienced 16 interviewers used in the data collection for the 2009 MCI.



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