



# USAID Regional Governance Activity (RGA) in Colombia, 2015-2020: Endline Annexes

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# Annex I: Recommendations Actions Matrix

Table A1.1 below details the key recommendations from the endline evaluation along with the targeted audience for the recommendation. We summarize the core recommendation in column 2 and then check boxes for the each of the relevant audiences for the evaluation.

Table A1.1: Recommendations Actions Matrix

No	Recommendation	Audience					
		USAID	USAID	GOC	Other	NGOs/	Municipalities
		Mission	HQ		Donors	CBOs	·
	Overall						
I	Encourage local elites to raise awareness of programming among the public	X					×
2	Target future programming to address region-specific gaps in outcomes	Х		X			
3	Communicate the links between programming, communication with local officials, and the peace process	Х		X	Х		
4	Conduct a follow-up evaluation of RGA to assess slower indicators	X					
_	Context						
5	Consider the periodicity of mayoral terms when interpreting RGA program effects	X	X				
6	Continue tracking security indicators to see whether they improve as public works activities increase	X		X			
7	Consider pausing programming unless GoC addresses security risks to social leaders	X			X		
	Component 2						
8	Emphasize early program results (revenue/ royalty gains) to gain trust	X	X	X	X	×	
9	Communication strategies should encourage realistic expectations about slower pace of service delivery	X	×	X			X
10	Devote resources to best-managed localities for proper use of resources	Х		Х			
П	Identify why trainings of municipal staffs may not lead to improved municipal performance	Х					X
	Component 4						
12	Prioritize citizen oversight and participation in regions with higher royalties for accountable investments	X		X			
13	Consider burdens that programs may impose on local leaders, such as exposure to security risks	Х					
14	Address security risks for local leaders and citizens for safe participation	Х		X			
15	Educate officials about the utility of citizen oversight	Х					X
16	Encourage / train new oversight committees to monitor COVID-19 assistance funds	X		×			
17	Continue to include ethnic minorities, women, and vulnerable populations in participatory oversight processes	X					Х

## Annex 2: Supplemental Analysis and Data

#### Annex 2a: Contextual Data and Results

From the survey, reported victimization increased by midline, but decreased by endline. See Figure A2.1 for the overall results, and Figure A2.2 for results separated out by gender. These figures show that victimization decreased by endline in both control and treatment, though more in control than in treatment. It is important to recall that, at endline, rates of non-response increased especially for some of the more sensitive questions, such as victimization. As such, the decreased rates of victimization may or may not be meaningful. Ultimately, it is difficult to say for sure, but we suspect that the lower rates of victimization were in part due to self-censoring in reporting. In the elite interviews, potential respondents were, indeed, reluctant to participate due to security concerns. To the extent the results are meaningful. Note that at endline women were victimized at higher rates in treatment relative to control, and the opposite was the case for men. This suggests that, contextually, the situation was worse for women than men at endline, and that the RGA municipalities faced particularly difficult circumstances for successful implementation.

Figure A2.1: Victim of Crime Across All Waves of the Evaluation

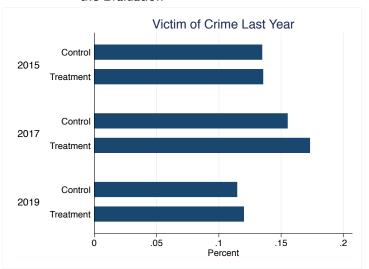
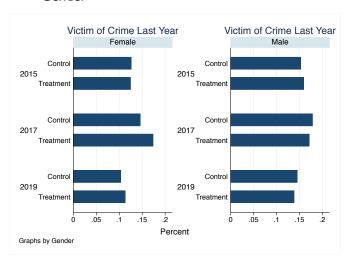


Figure A2.2: Victim of Crime by Self-Reported Gender



Figures A2.3 and A2.4 show homicide rates by region across the waves of the evaluation. Homicide rates are much higher in treatment municipalities relative to controls across all three waves, and homicides appear to be increasing in treatment municipalities while decreasing in controls. Regionally, Valle de Cauca, Antioquia, and Putumayo experienced substantial decreases in homicides from baseline to endline, suggesting important improvements, whereas Nariño and Cauca saw large increases. This is consistent evidence from interviews with community leaders. Across treatment and control municipalities, leaders stated feeling insecurity had increased in their municipalities, especially for social leaders who were increasingly being threatened. Municipal administrators were also more reluctant in the endline than in the baseline and midline to talk about security conditions due to security concerns.

Figure A2.3: Homicide Rate Across All Waves of the Evaluation

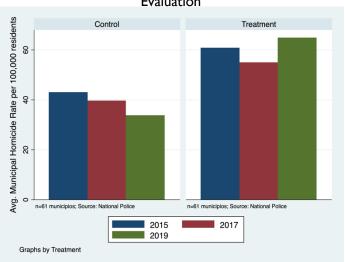
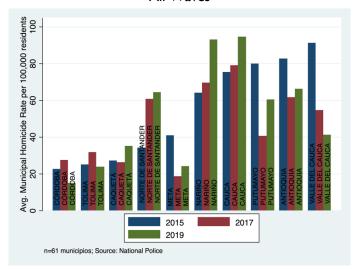


Figure A2.4: Homicide Rate Across All Regions for All Waves



Community leaders also mentioned that mayors are likely forced to negotiate with armed groups about what activities can or should be done in the municipality, and where within those municipalities. In rural areas where armed groups control territory, mayors' offices are forced to pay armed groups through their contractors to carryout infrastructure projects. As a community leader from Tumaco explained:

"All armed groups impact municipal performance. If the mayor or a contractor is going to build something, they get to the vereda and find that they [the armed groups] ask for a part of the money in the contract...Social investment becomes very difficult, there [are] always calculations to be made of how much the mayor needs to give the armed groups, and time spent finding legal loopholes in contracts to do that..."

Tables A2.1 and A2.2 displays the interview results of perceptions of armed group influence over public works. In control municipalities, community leaders more frequently mentioned that armed groups could have an impact on the mayor's performance. In treatment municipalities, by contrast, there was greater reluctance to discuss the subject as indicated by the greater percent of leaders not answering these questions.

Table A2.1: Do armed groups impact mayor's office performance? Community Elite

		Control		Treatment			
	2015	2017	2019	2015	2017	2019	
No	20.7%	33.8%	31.9%	24.3%	27.5%	29.5%	
Yes	63.4%	29.6%	36.3%	63.4%	44.9%	34.2%	
NA	15.9%	36.6%	31.9%	12.4%	27.5%	36.3%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table A2.2: Do armed groups impact mayor's office performance? Municipal administrators

		Control		Treatment			
	2015	2017	2019	2015	2017	2019	
No	48.9%	70.8%	30.8%	55.3%	64.5%	16.7%	
Yes	44.4%	29.2%	61.5%	38.2%	25.8%	50.0%	
NA	6.7%	0.0%	7.7%	6.6%	9.7%	33.3%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Given the difficult security environment and mixed results, we also examined the basic correlations of key outcome indicators and the security environment. Table A2.3 shows those correlations and highlights (shading and \*) any in which the correlation is higher than 0.3 (or -0.3). The 0.3 threshold is arbitrary but draws attention to what may be considered possibly important relationships. It appears that the safer people feel, the more likely they are to report greater access to services (0.4106) and the better the security conditions the more likely people are to report involvement with participatory budgeting (0.3685). Predictably, higher feelings of safety are correlated with a lower likelihood of being a victim of crime last year (-0.324), two different measures of a similar dynamic. Finally, the trust in the mayor's office is associated with not being a victim of crime.

As with many of the other results in the endline, the results here are mixed, but do suggest that security dynamics did, in fact, complicate participation in some important ways. Indeed, even those indicators with lower correlations seem to trend in this direction. For example, ease of participation in political life is positively correlated with better security conditions. Being a victim of crime, moreover, tracks closely with feelings of safety, trust, and security conditions. These results contribute to the larger theme in the endline that pronounced positive results of RGA are few, and despite some initial improvement in key areas, by endline effects were not strong and likely compounded by a difficult contextual environment.

Table A2.3: Correlations between Security and Key Program Indicators

	Feelings of safety	Security conditions	Mayor's office
Property tax	0.1631	-0.0347	-0.134
Access to services	0.4106*	0.0438	0.2647
Easy to participate in political life	0.1552	0.2606	0.1712
Discouragement to oversight	-0.1807	0.0025	-0.1114
Participatory budgeting	0.1249	0.3685*	-0.1573
Municipal responsiveness	0.2582	0.2188	0.2619

	Feelings of safety	Security conditions	Mayor's office
Peace process support	-0.0402	0.0275	0.1142
Armed groups move freely	0.031	0.022	-0.0138
Homicide rate	0.0006	-0.232	-0.1762
Victim of crime last year	-0.324*	-0.2411	-0.4082*

#### Annex 2b: Component 2 Data and Results

Component 2 of RGA aimed to improve municipal fiscal capacity and management. Although there were some improvements, especially with respect to royalties, there were only marginal changes in many of the standard fiscal and management indicators. The main report begins by presenting data on total revenues in control and treatment municipalities across waves as well as by region.

Even if revenues did not increase significantly, municipal administrators feel that the support from RGA has been crucial to understand better the SGR and more efficiently plan and report their financial activity. These skills may bring long-term benefits to the extent that knowledge is effectively passed to future administrations. Qualitative accounts show great enthusiasm for these forms of assistance. As a municipal administrator from Montelíbano, Córdoba described their experience with the program, "RGA program professionals helped us a lot in formulating projects in the SGR. The process brought so many benefits for us, we saved money, we spent it faster."

Figures A2.5 and A2.6 shows the results for Fiscal Performance both across waves and regions. Across waves, there was almost no change over time. Across regions, changes are mainly observed in Putumayo (declines in performance). Fiscal performance ratings therefore do not seem to have been impacted by RGA activity.

Figure A2.5: Fiscal Performance Across Waves and RGA Activity

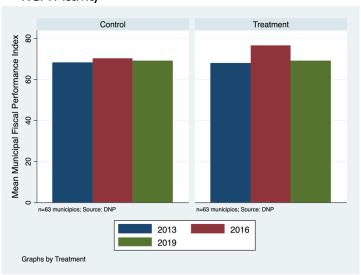
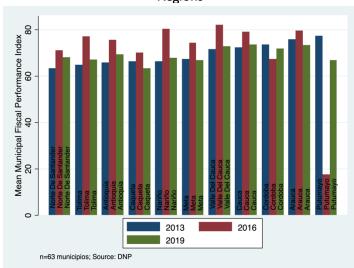


Figure A2.6: Fiscal Performance Across Waves and Regions



Another key indicator is the Municipal Performance Index, reported in Figures A2.7 and A2.8. The results are marginally negatively significant, in contrast to expectations from the theory of change of a positive result, the RGA is associated with no meaningful difference.

Figure A2.7: Municipal Performance Index Across Waves and RGA Activity

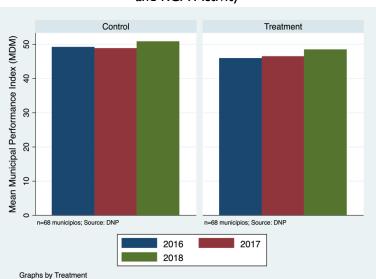
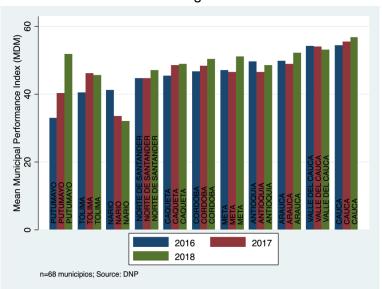
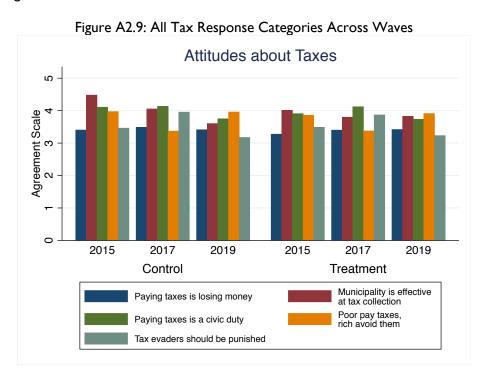


Figure A2.8: Municipal Performance Index Across Waves and Regions



We report some specific attitudes about paying taxes in the main report, but present the full results here. As Figure A2.9 shows, attitudes are relatively constant over time. There are a few differences, but none that are systematically meaningful in treatment relative to control. Thus, the RGA program, while focused on a number of outcomes related to financial management, did not seem to have widespread effects on citizen attitudes about taxes. That includes the five separate indicators of perceptions about taxes reported in Figure A2.9.



Focus group participants and community leaders agree that the lack of information on property and land use is a central factor inhibiting a positive "tax culture" in municipalities. Community leaders usually point

to the lack of "civic culture" and citizens' limited comprehension of their duties as impeding tax collection. Lay citizens in focus groups more frequently mentioned the precarious economic conditions in small municipalities as a main reason for low tax payment rates. Finally, municipal administrators emphasized the positive impacts of educating taxpayers for increasing municipal revenue.

By region, royalties revenues declined in most regions across the waves of the study. In some cases, such as Nariño, the declines are substantial. See Figure A2.10. As discussed in the main report, there were relative improvements in treatment versus control in spite of these regional and overall trends.

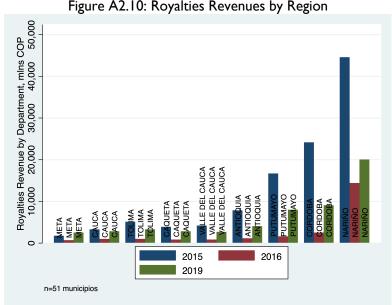


Figure A2.10: Royalties Revenues by Region

Taking a broader look at tributary revenues suggests no meaningful differences between treatment and control municipalities. Similar to property revenues, tributary revenues increased from the baseline to the later stages across the board, but more in control than in treatment. This increase was also uneven across departments. See Figures A2.11 and A2.12.

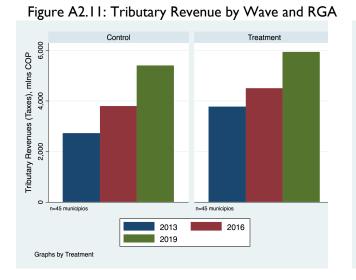
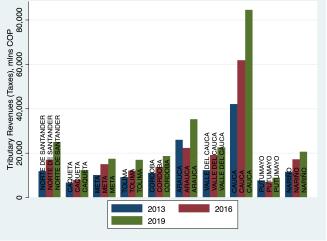


Figure A2.12: Tributary Revenue by Wave and Region



Expenditures showed little change in both control and treatment over time, and the results are not significantly meaningful comparing treatment and control. The regional graphs also do not show major differences across regions, with the notable exception of Nariño. See Figures A2.13 and A2.14.

Figure A2.13: Total Expenditure by Wave and

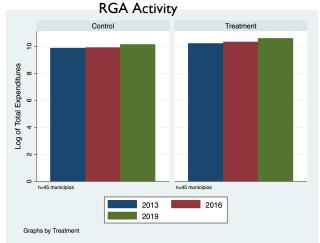
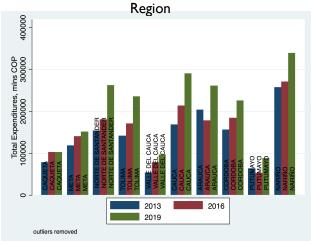


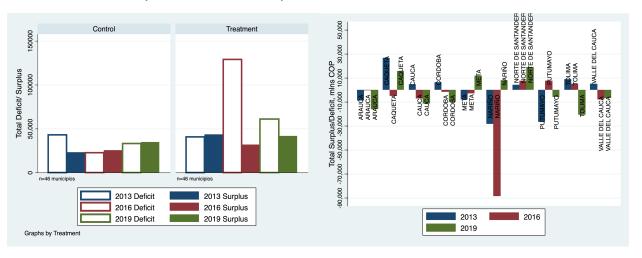
Figure A2.14: Total Expenditure by Wave and



Figures A2.15 and A2.16 display deficits and surpluses over time and across municipalities. In each graph pane, both deficits and surpluses are shown for each evaluation wave. The two far-left bars in the left pane of Figure A2.15 show the deficits and surpluses in control and treatment municipalities before the baseline. In the left pane, deficits and surpluses change within control municipalities. Comparing the left pane to the right pane, deficits and surpluses are varying across control and treatment and over time. The graphs show that both deficits and surpluses declined over time within control and within treatment, which is both good and bad—while deficits declined, surpluses also declined, dampening net gains in revenues. By the endline, deficits in treatment municipalities were higher than in controls and surpluses in controls were higher than in treatment. While not statistically meaningful, these results are not what would be expected from the perspective of good financial management.

Figure A2.15: Total Deficit by Wave & RGA Activity

Figure A2.16: Total Deficit by Wave and Region



#### Annex 2c: Component 4 Data and Results

#### **Public Accountings**

Figures A2.17 and A2.18 show public accountings (rendiciones de cuenta) at baseline and endline for control and treatment areas (note that there is limited information and therefore smaller samples for 2019). In both cases, the public accountings substantially decreased over time, with a larger decrease in treatment municipalities. The regional graphs show where, in particular, the decreases occurred regionally. We again caution that data availability may be responsible for the apparent decreases in public accountings.

Figure A2.17: Public Accountings by Group

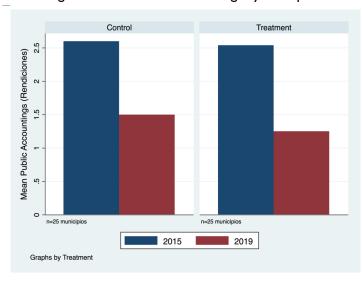
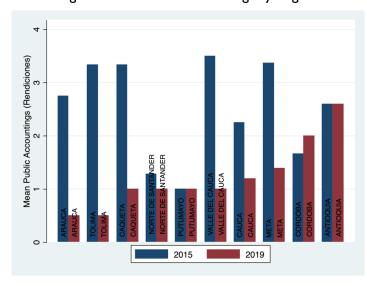


Figure A2.18: Public Accountings by Region



#### Trust and Legitimacy

Our interviews, surveys, and focus groups do not show significant changes in levels of trust in government or non-government institutions, either across municipalities or between baseline and endline measurements. See Table A2.4. However, interviews show that, at the endline, participants had additional information with which to assess mayoral offices, and factors such as corruption and unfulfilled promises stand out. Community elites' level of trust in local government decreased from baseline to midline and midline to endline in treatment and control municipalities alike. In the baseline measurement, most mayors had just started their terms so the early positive perceptions may have reflected signs of hope. At the endline, as mayors were finishing their mandates, communities saw little or no improvement in conditions, which likely undermined trust in the local government.

Table A2.4: Do you trust the local government? Community Elite

		Control		Treatment				
	2015	2017	2019	2015	2017	2019		
No	16.55%	33.3%	37.2%	16.83%	31.4%	29.5%		
Yes	82.07%	66.7%	50.4%	77.23%	66.9%	44.5%		
NA	1.38%	0%	12.4%	4.03%	1.7%	26.0%*		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

<sup>\*</sup>Note that many interviews did not ask this question at endline prior to the mayoral elections. Some interviews were therefore conducted after mayoral elections, when respondents were less comfortable answering reporting on a new mayor.

Trust and legitimacy are also reflected in indicators about trust in armed actors, trust in institutions involved in conflict resolution, and with respect to the impact of illegal armed actors on municipal performance. Citizens tend to trust more in legal institutions and tend to turn to them (or other citizens) to solve disputes. Surveys and community elite interviews show that, over time, communities became slightly more aware of the impact of illegal armed groups on municipal performance.

We also asked citizens about their trust in a variety of state institutions. The data indicate that people have mixed levels of trust in most state institutions. In the baseline, midline, and endline evaluations, training and education centers, such as SENA, stand out as being the most trusted institutions, as reported in Figures A2.19 and A2.20. Overall, the results in these figures show a slight decline in trust across institutions in Colombia from baseline to endline, rather than improvement. Colombia Responde is among the institutions with the lowest levels of trust, according to the survey data. It is likely that increasing trust in institutions is a process that takes time, especially given the low baseline from which most trust levels began.

Trust declined a little more in some treatment municipalities relative to control municipalities. For example, 19% of respondents had scored trust in the mayor as high (5 or 6) in the control condition at endline, a decline by 4 percentage points since baseline. This is compared to 10% in the treatment group that scored trust in the mayor high at endline, a decline in 9 percentage points. Even for the highly Training and Education centers there were declines in trust that across control and treatment. Finally, in some areas like social organizations/NGOs, the level of trust across time and control/treatment stayed almost the same.

Level of Trust in State Institutions Level of Trust in State Institutions 2015 Trust scale Trust scale Control City council Formal judicial Department government Formal judicial Social orgs/NGOs Social orgs/NGOs Alternative justice Alternative justice Training and Ed Centers Training and Ed Centers Community action board Community action board Territorial Consolidation Colombia responds Territorial Consolidation Colombia responds

Figures A2.19 and A2.20: Level of Trust at Baseline and Endline

Government and community elites shared their thoughts about trust through the interviews. In focus groups and interviews, the mayors' offices were at the center of the discussion about trust and legitimacy in state institutions. As in the baseline, corruption was a frequent reason for distrust in local government. Nevertheless, at the endline, participants had new information on which to judge mayors' trustworthiness, given mayors had been in office for a longer period. Focus group participants, for instance, spoke about changes in mayors' attitudes towards rural communities, earlier making campaign promises only later to fall by the wayside. As a participant from Tibu said:

"Before being mayor, he went to every house and asked about the needs of the people. One of my daughters lost her house one day, the mayor said he was going to help her to get a piece of land to build a new one. Until now he hasn't delivered on his promise. While he was campaigning, we saw him everywhere, after he was elected he's never around, he's always travelling"

Based on the interview and focus group data, we also found that the prime factors that increase citizen trust in the mayors' offices remained the same as in the baseline: their close relationships with communities and their human qualities. A community elite in Puerto Libertador, Córdoba describes a mayor who they trust in the following way:

"...[the mayor] was born and raised here, he has lived here his whole live and has suffered like us, had the same needs we do. We are in his hands now, we believed in him and we put the administration of the municipality in his hands... he's a God fearing person and that will help him do things right."

Another leader from Segovia, Antioquia said:

"Of course [we trust him], he is one of us and he is very effective. He listens to people and really cares for us. He goes to see works done around the municipality and makes sure the police are vigilant as well."

Given that, at the time of the endline, mayors had been in office for a more extended period, some of the main reasons to trust them were the visibility of public investment and their direct involvement with

community organizations. For instance, in Corinto, Cauca, trust in the mayor came from training programs for Indigenous and Afro communities:

"We trust the mayor because he has developed various trainings for social organizations, peasants, Afro-Colombians, and other vulnerable groups."

In Angostura, Antioquia another leader justified trust in mayor in the following statement:

"We trust him because we have seen the infrastructure works and the investment. He also supports and works with the JAC."

Similarly, municipal officials held more positive perspectives about the trust that citizens have in the administration. As in the baseline, most of them believe that citizens trust their administrations, although they do not provide clear evidence of this. Most positive sentiments indicate that actions that enhanced citizen participation also resulted in increased trust from citizens.

A government official from Nechí, Antioquia told us:

"We always had a relation based on trust. We always had the trust of the community and we trusted the veedurias too."

Another government official from Montelíbano, Córdoba said:

"With the help of the community we gained their trust. The mayor is a very popular person, he meets with the presidents of the JACs, with religious leaders. The community is always willing to participate in debates."

To understand citizens' perception of armed actors, we first asked citizens about levels of support for various legal and illegal armed actors (i.e., government army, government police, and illegal armed groups). The results show no statistically higher ratings of government actors, though ratings are not statistically higher for armed actors either. (See full regression results in Table A2.9 below.) Second, we asked people who they would turn to in the case of a dispute. Respondents mostly reported they would turn to neighbors and government institutions rather than illegal armed groups, a result that is largely consistent with the baseline (See full regression results in Table A.2.9 below). Third, we asked how citizens perceive the effect of the presence of illegal armed groups on municipal performance. According to the results in Figure 5 of the main report, presence of illegal armed groups is a core concern that undermines broader trust in the system to work well.

In sum, as stated by RGA, a key hope is that by increasing the capacity of municipalities and departments to deliver services, governance will improve while trust, credibility and legitimacy will be built. That said, building trust can be a slow process. The survey data and community interviews suggest RGA municipalities have sustained similar, though not terribly high, levels of citizen trust in government. Citizens trust their local administrations insofar as they feel mayors and their teams are committed to the well-being of the community. Qualitative data show that the engagement of mayors is gauged by the amount of time they spent in their municipalities or public appearances, and by the number of "visible" public works (e.g., road improvement, parks, community centers, etc.). One of the challenges is that citizens may have expectations about government performance that are different from government capabilities. Similarly, corruption and patronage are pervasive forces across many Colombian institutions, and still negatively affect citizen's trust of mayoral performance in some municipalities.

To make trust more concrete, we considered a specific health issue. While people lacked trust in different levels of institutions, from the municipal to national levels, trust did improve across the regions where the government of Colombia handled Zika well (See Figure A2.21). This is potentially a positive sign as the Colombian government, like other governments around the world, struggle in dealing with COVID19.

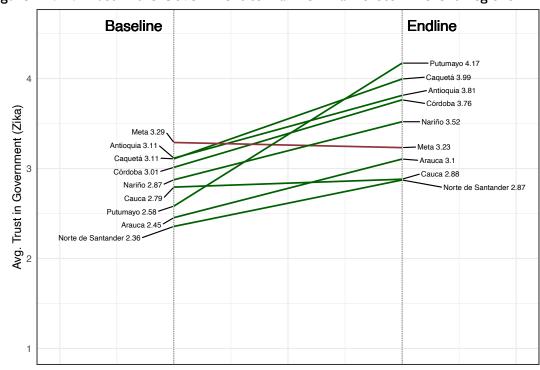


Figure A2.21: Trust in the Government to Handle Zika Across Different Regions

Green = Increase, Red = Decrease

#### Citizen oversight

In addition to what we consider in the main report (Table 8 and Figure 28), here we report three survey-based measures on citizen oversight processes: whether respondents know about citizen oversight (Figure A2.22), whether they participate in citizen oversight (Figure A2.23), and whether oversight helps with corruption (Figure A2.24). For knowledge about oversight, respondents in treatment areas were slightly more knowledgeable than in controls, but there was not much improvement from baseline to endline in either group. For participation, roughly 20% of respondents in treatment and control participated in citizen oversight, but there were no differences between treatment and control, nor much change over time. On whether oversight bodies help fight corruption, the reported rates at all three waves are high, but they gently decline over time in both treatment and control.

Figure A2.22: Do respondents know about citizen oversight?

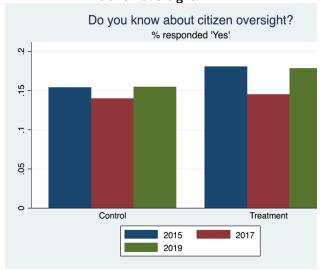
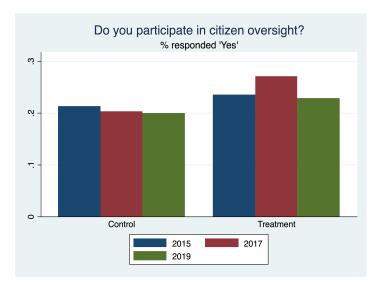


Figure A2.23: Participation in Citizen Oversight



We queried community elites about whether they participated in community oversight. Table A2.5 shows that participation in these groups increased from baseline to endline both in treatment and control municipalities. However, citizens who participated in focus groups consistently voiced not knowing what a veeduría is, and very few were interested in participating for fear of retaliation from armed groups.

Table A2.5: Does your organization do oversight? Community Elite

Does your organization do oversight? Community Elite									
		Control		Tr	eatment				
	2015	2017	2019	2015	2017	2019			
Yes	36.6%	42.6%	54.9%	37.1%	38.7%	55.5%			
No	57.9%	52.7%	37.2%	56.4%	57.8%	34.2%			
NA	5.5%	4.7%	8.0%	6.4%	3.5%	10.3%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

How much does citizen oversight help fight corruption?

Average on scale of 'None' (0) - 'A lot' (6)

Control

Treatment

2015
2017

Figure A2.24: How much does oversight help fight corruption

We also asked municipal administrators about their perception of oversight groups (Table A2.6). As discussed in the report, perceptions about these organizations and their contributions to local governance and accountability were positive. However, it was also common to hear disclaimers about how veedurías were "politicized" as well as suspicions that they look for ways to thwart the work of the mayor.

Table A2.6: Percent of coded reference. Perception of oversight groups (veedurías). Municipal administrators

Perception of oversight group:	s (veedurías).	Municipal a	dministrator	S		
		Control		7	reatment	
	2015	2017	2019	2015	2017	2019
Contribute to local governance/improve municipality performance	55.6%	36.6%	69.2%	55.3%	64.4%	50.0%
Provide different point of view	8.9%	2.4%	0.0%	3.9%	0.0%	0.0%
No oversight groups (veedurías) in municipality	4.4%	4.9%	0.0%	3.9%	4.4%	0.0%
Obstacle to municipality's performance	0.0%	4.9%	7.7%	2.6%	2.2%	0.0%
Politicized	4.4%	4.9%	7.7%	3.9%	0.0%	16.7%
They are a citizen's right	15.6%	12.2%	0.0%	10.5%	13.3%	8.3%
Not properly trained	2.2%	9.8%	0.0%	2.6%	2.2%	0.0%
Strengthen participation in municipality	6.7%	4.9%	0.0%	3.9%	4.4%	0.0%
Improve relation between community and local government	0.0%	9.8%	15.4%	0.0%	4.4%	8.3%
Corrupt	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%
NA	2.2%	9.8%	0.0%	13.2%	4.4%	8.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

With respect to broader participation, we asked community elites about their participation in political life, and how that has increased or decreased. Tables A2.7 and A2.8 demonstrate that fewer think it is easier,

and about the same think it is more difficult to participate. Table A2.8 shows that few respondents reported participation decreasing, and about the same percentages reporting increases, though more increases in the control than in the treatment municipalities.

Table A2.7: Is it easy to participate in political life? Community Elite

Is it easy to participate in political life? Community Elite								
		Control						
	2015	2017	2019	2015	2017	2019		
Easy	56.6%	59.4%	54.9%	60.9%	52.6%	51.4%		
Difficult	19.3%	16.8%	20.4%	16.8%	15.0%	15.8%		
Somewhat difficult	9.7%	18.9%	12.4%	14.9%	12.9%	6.2%		
NA	14.5%	4.9%	12.4%	7.4%	19.6%	26.7%		
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Table A2.8: Has participation increased or decreased in the past two years?

Has political participation increased or decreased in the past two years? Mayor's office									
		Control		reatment					
	2015	2017	2019	2015	2017	2019			
Decreased	15.6%	0.0%	0.0%	3.9%	0.0%	0.0%			
Increased	77.8%	87.0%	76.9%	81.6%	90.0%	75.0%			
Same	0.0%	10.9%	23.1%	3.9%	4.0%	16.7%			
NA	6.7%	2.2%	0.0%	10.5%	6.0%	8.3%			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

# Annex 2d: All Regression Results

## Table A2.9: All raw regression results

Description Can Group Move Freely?: Criminal bands	N 69	0.036	se 0.062	t 0.583	p sig_10 0.562	sig_5	sig_1
Can Group Move Freely?: ELN	69	0.05	0.002	1.698	0.094 *		
Can Group Move Freely?: FARC	69	0.199	0.064	3.107	0.003 *	*	*
Can Group Move Freely?: Paramilitaries	69	0.07	0.034	2.077	0.042 *	*	
Can Group Move Freely?: Guerrillas	69	0.12	0.042	2.84	0.006 *	*	*
Can Group Move Freely?: Drug traffickers Level of trust in: Mayor's office	69 69	0.052	0.033	1.563 0.439	0.123		
Level of trust in: Mayor's office Level of trust in: city council	69	0.055	0.126	0.439	0.662 0.341		
Level of trust in: departmental government	69	0.127	0.005	1.328	0.189		
Level of trust in: national government	69	0.032	0.092	0.346	0.731		
Level of trust in: formal justice institutions	69	0.032	0.078	0.406	0.686		
Level of trust in: alternative justice institutions	69	0.086	0.1	0.86	0.393		
Level of trust in: agricultural institutions	69	0.055	0.103	0.531	0.597		
Level of trust in: social organizations/ NGOs Level of trust in: training and educational centers	69 69	0.106	0.114	0.929	0.356		
Level of trust in: ombudsman	69	0.062	0.113	0.833	0.408		
Level of trust in: national police	69	0.048	0.068	0.711	0.479		
Level of trust in: national army	69	0.015	0.097	0.157	0.875		
Level of trust in: national navy	69	0.037	0.074	0.507	0.614		
Level of trust in: municipal ombudsman	69	-0.003 0.093	0.087	0.03	0.976		
Level of trust in: community action board  Level of trust in: The Unit for Attention and Integral Reparation of Victims	69 69	0.093	0.085	0.502	0.278 0.618		
Level of trust in: the unit for territorial consolidation	69	0.033	0.088	0.302	0.405		
Level of trust in: the land restitution unit	69	0.028	0.058	0.478	0.634		
Level of trust in: Colombia Responds	69	0.193	0.069	2.795	0.007 *	*	*
Admin capacity: 2013 vs. 2017	69	3.42	6.98	0.49	0.626		
Fiscal performance: 2013 vs. 2019	67	1.259	5.586	0.225	0.822		
Total revenue: 2013 vs. 2019	63 62	0.481	0.233	2.067	0.044 *	:	
Property revenues: 2013 vs. 2019 Taxes: Paving taxes is losing money	69	0.443	0.193	0.414	0.027		
Taxes: The municipality is effective at tax collection	69	-0.01	0.121	0.087	0.931		
Taxes: Paying taxes is a civic duty	69	-0.101	0.087	1.172	0.245		
Taxes: The poor pay taxes; the rich avoid them	69	-0.007	0.109	0.066	0.947		
Taxes: Tax evaders should be punished	69	0.147	0.144	1.024	0.309		
Royalties: 2015 vs. 2019	51	0.401	0.084	4.751	0 *	*	*
Access to public services: Getting worse Access to public services: Staying the same	69 69	-2.058 -1.627	2.052 1.969	1.003 0.826	0.319 0.412		
Access to public services: Staying the same	69	-2.27	2.635	0.862	0.392		
Corruption	69	-0.089	0.156	0.573	0.568		
Participation in event: Cultural, sporting	69	-0.001	0.024	0.022	0.983		
Participation in event: Marches, demonstrations	69	0.005	0.018	0.275	0.784		
Participation in event: Improve security	69	0.015	0.015	1.027	0.308		
Participation in event: Political party events Participation in event: Government	69 69	0.002	0.017	0.099 1.576	0.921		
Participation in event: Government  Participation in event: Labor strikes, demonstrations	69	0.017	0.011	1.197	0.12		
Participation in event: Fundraising events	69	0.012	0.021	1.104	0.273		
Participation in event: Indigenous marches (Mingas)	69	0.031	0.01	2.943	0.004 *	*	*
Participation in event: Participatory budgeting	69	0.016	0.011	1.414	0.162		
Responsiveness	69	-0.018	0.112	0.157	0.876		
Victim last year	69	-0.027	0.02	1.339	0.185		
Who can be a leader in your community: A member of the opposition party?  Who can be a leader in your community: A woman?	69 69	0.015	0.037	2.213	0.685		
Who can be a leader in your community: An Afro-Colombian?	69	0.019	0.043	0.434	0.666		
Who can be a leader in your community: A former combatant?	69	-0.045	0.039	1.155	0.252		
Who can be a leader in your community: A young person?	69	0.014	0.025	0.556	0.58		
Who can be a leader in your community: An LGBT person?	69	0.004	0.051	0.074	0.941		
Homicide rate: 2015 vs. 2019	66	3.406	9.363	0.364	0.717		
Solving disputes	69	0.148	0.159	0.364	0.717		
Armed actors	69	0.044	0.05	0.894	0.374		
Renditions: 2015 vs. 2019	49	-0.323	0.498	0.648	0.523		
Deficit: 2013 vs. 2019	62	-2770	2830.9	0.979	0.333		
Tributary revenues: 2013 vs. 2019	62	0.017	0.206	0.084	0.934		
Municipal expenditures: 2013 vs. 2019	62	0.45	0.315	1.429 0.597	0.16 0.552		
Afraid to travel Rating of services: Services of the Armed Forces (Army, Navy, Air Force)	69 69	-0.023	0.038	0.597	0.552		
Rating of services: Non-State services (legal private security services, etc.)	69	0.296	0.115	1.906	0.061 *		
Rating of services: The formal justice services (prosecution, judges, attorneys, etc.)	69	-0.061	0.09	0.678	0.5		
Rating of services: Alternative Justice services (Peace Judges, Equity Conciliator, etc.)	69	0.051	0.087	0.582	0.562		
Drugs and coca response: Should not be grown because they are illegal	69	0.183	0.218	0.84	0.404		
Drugs and coca response: Production positively affects families who grow them	69 69	-0.035 0.296	0.109	0.318	0.751		
Drugs and coca response: Only way for some families to survive Drugs and coca response: Family and friends think cultivation is bad	69	0.296	0.154	1.923 0.064	0.059 * 0.949		
Royalties (new): 2015 vs. 2018	54	6E+09	4E+09	1.446	0.545		
Veedurias: Do you know about citizen oversight?	69	-0.009	0.021	0.454	0.651		
Veedurias: Do you participate in citizen oversight?	69	-0.027	0.065	0.414	0.681		
Veedurias: Does the board help with the oversight of public works?	69	0.097	0.058	1.681	0.097 *		
Veedurias: How much does citizen oversight help fight corruption?	69	0.064	0.129	0.498	0.62		
Municipal performance index (MDM): 2016 vs. 2018	69	-5.539	2.775	1.996	0.05 *	•	

#### Annex 2e: Arauca Specific Dynamics: Endline Relative to Midline

The department of Arauca faced especially severe security concerns in recent years—a critical contextual factor in understanding broader success. We analyzed Arauca separately because of the limited ability to collect information at the baseline, in particular. We therefore consider midline results as a baseline for Arauca from which changes through the endline are assessed. Given the limited number of observations and waves of data, the results here are limited, and we only report some select results.

While Arauca has been plagued by ELN violence, the midline results suggest views in Arauca do not differ much from the rest of the RGA treatment and control municipalities in Colombia. As Figure A2.25 shows, support in Arauca for the Army and formal justice institutions was moderate and compares favorably to other regions of the country. In the treatment group, support for non-state services and alternative justice is a little higher on average but a little lower for the Army and formal justice.

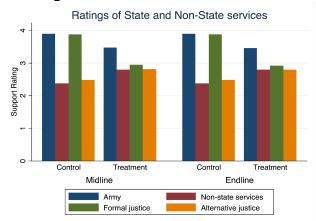


Figure A2.25: Ratings of State and Non-State Services in Arauca Alone

Figure A2.26 illustrates a similar pattern related to crime and victimization as compared to other parts of Colombia. Over 20% of the respondents in the treatment group report being the victim of a crime but that number drops to a little over 15% in the control group.

We could pool the control and treatment municipalities in Arauca with the other control and treatment municipalities in Colombia for purposes of cross-sectional comparisons.

Figure A2.26: Victim of Crime Last Year in Arauca Alone

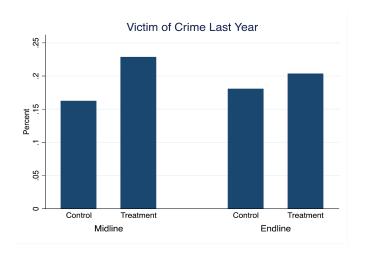


Figure A2.27, which shows several different views on paying taxes, reflects similar results to those for the rest of Colombia. This suggests Arauca may not be substantially different even given the high levels of violence. Views on taxes in Arauca are largely stable. When asked whether the municipality was effective at tax collection or whether paying taxes was a civic duty, views were stable and positive. When asked whether paying taxes is losing money, there was a 7 percentage point reduction from midline to endline. A disappointing result was a 17 percentage point reduction in people who felt tax evaders should be punished. Given Arauca's delicate security situation, we did not conduct any focus groups or interview municipal elites.

Figure A2.27: Attitudes about Taxes in Arauca Effective at Collection Paying Taxes is Losing Money 2017 2019 2019 2017 0.6 Percentage 0.2 Agree Disagree Agree Disagree Disagree Paying Taxes is Losing Money Muni is Effective at Tax Collection Paying Taxes is a Civic Duty Should be Punished 2017 2017 2019 2019 0.6 0.6 Percentage 5.0 Percentage 0.2 0.0 Agree Disagree Agree Disagree Agree Disagree Paying Taxes is a Civic Duty Tax Evaders Should be Punished

#### Annex 2f: Other Region-Specific Dynamics

We report on each of the following four indicators at other places in the report, but elsewhere by treatment/control and wave status, or by Department. Here we aggregate to the regional level and report the results.

Figure A2.28: Mean Municipal Performance Index by Region and Wave

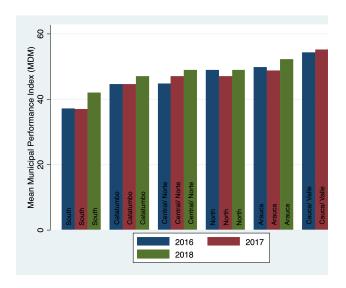


Figure A2.29: Mean Tributary Revenues by Region and Wave

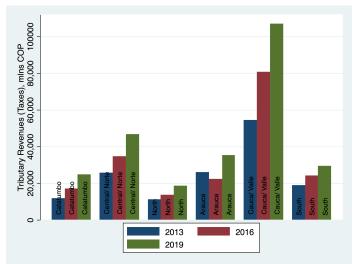


Figure A2.30: Mean Participation in Participatory Budgeting by Region & Wave

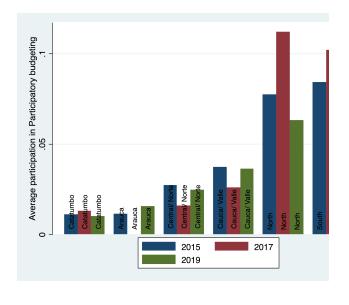
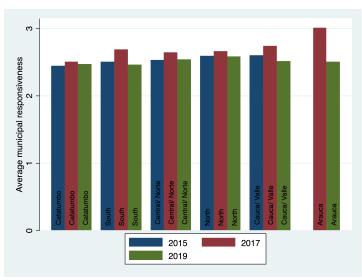


Figure A2.31: Municipal Responsiveness by Region and Wave



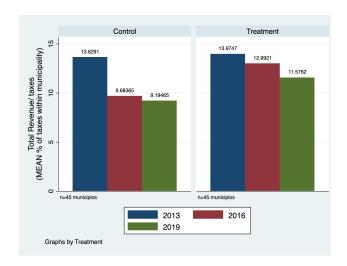
#### Annex 2g: Rescaled Financial Indicators

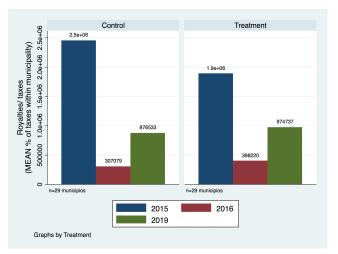
#### As a Proportion of Taxes

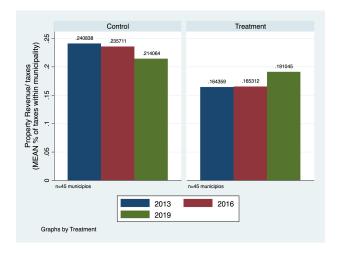
The following figures (A2.32-A2.37) represent each financial indicator as a proportion of local (municipal) taxes. *Total Revenue* and *Total Expenditures* outpace the amount of taxes gathered in each municipality by as much as 13 times, i.e., for each peso of tax gathered, 13 pesos are gathered from other municipal revenue sources. However, this amount declines over time in both Control and Treatment municipalities. This shows both that municipalities are gaining more Total Revenue (as seen in the next section as well), but also that they are gathering more local taxes. And that taxes are increasing at a slightly higher rate.

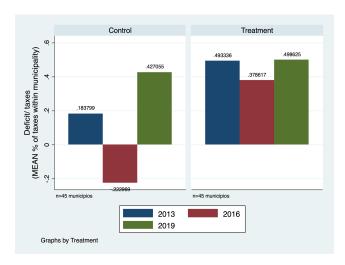
Note that these graphs show the *averages* of these indicators within years and Control and Treatment groups, i.e., average 2013 Control Revenues outpaced average 2013 Control Taxes by about 13:1, which goes down to about 9:1, on average, by 2019.

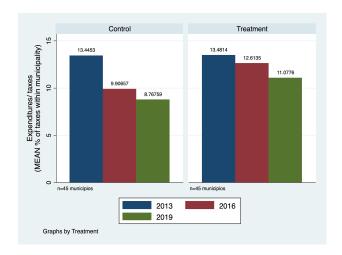
Figures A2.32-A2.37

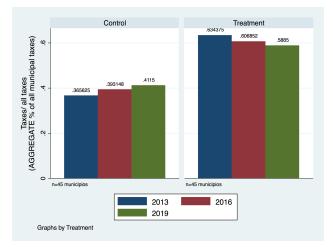










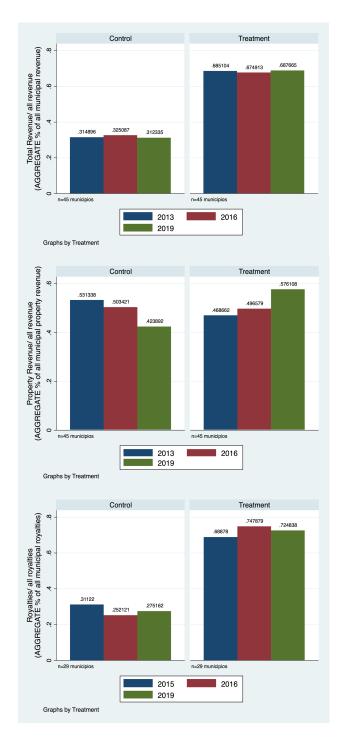


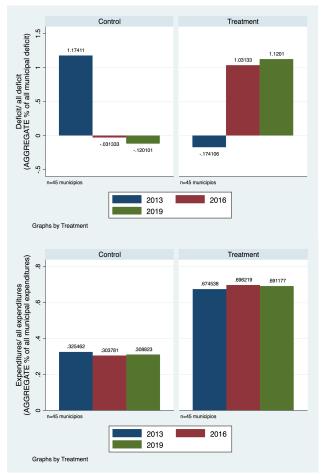
#### Other Proportion Graphs

This section shows each financial metric as a proportion of the total of that metric, e.g., Revenues as a proportion of Total Revenues. See Figures A2.38-A2.42. Here it is interesting to note that Treatment municipalities make up about 2/3 of the Revenues, Expenditures, Royalties, and Taxes found in the entire dataset (45 municipalities). However, as evidenced by the first section, financial metrics in proportion to taxes are still comparable.

Another interesting trend is that, although the Control municipalities represent the majority of deficits in 2013, this trend flips to the Treatment municipalities in years 2016 and 2019 – this pairs with the high levels of deficits in Treatment municipalities in 2016 (shown below) and the increasing levels of Total Expenditures in Treatment municipalities from 2016 to 2019 (also shown below).

## Figures A2.38-A2.42



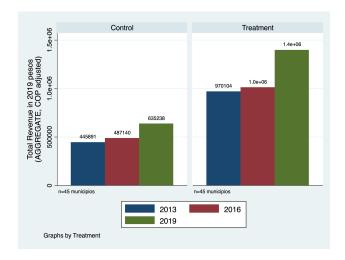


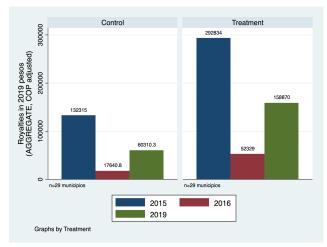
#### In 2019 Pesos

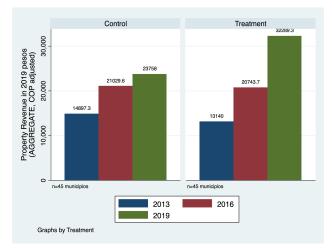
The following are aggregate graphs to show the total financial indicators (in 2019 pesos) by municipality across Control and Treatment, and across years. Here we can see what was hinted at above – Total Revenues and Expenditures are increasing by year, but only slightly; the only exception to this being the jump in Expenditures and Revenues in the Treatment municipalities from 2016 to 2019.

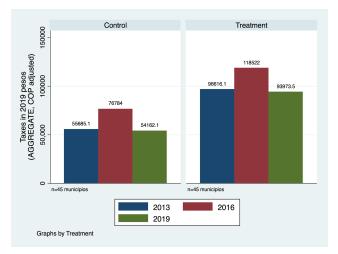
These changes are outpaced by the increases to Taxes, which saw an impressive increase in both Treatment and Control municipalities from 2013 to 2016 (also note that taxes are characteristically higher, on average, in Treatment municipalities). These taxes go back down in 2019, but this couples with the spike in Revenue and Expenditures, meaning that these metrics in proportion to taxes still go down, as evidenced by the last section. Also of note: there were considerably more deficits in 2016 in the Treatment group of municipalities.

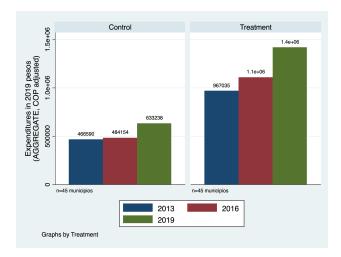
## Figures A2.43-A2.48

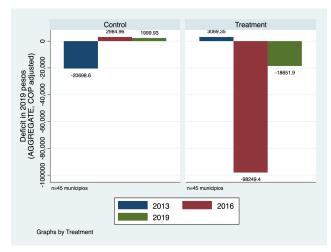












# Annex 3: Findings, Conclusions, and Recommendations Table

Table A3.1 disaggregates the various categories to give a more detailed perspective of changes in context or impact over time and across treatment and control municipalities. Each row captures aspects of context and the two components and the caption explains exactly which indicators were used to proxy the concepts.

Table A3.1: Findings, Conclusions, and Recommendations Summary Table

CATEGORIES		FINDINGS O II		IM	CONCLUSIO NS	RECOMMEND .	
	FINANCIAL, PERFORMANCE						
A.	REVENUES						
I.	Total municipal revenues (\$)	There are greater overall revenues across municipalities including between treatment and control	+	+		Property and royalty revenues should be emphasized early to improve trust and help achieve later downstream outcomes, such as combatting corruption	
2.	Property tax (\$)	There are greater property tax revenues across municipalities and in treatment relative to control	+	+	There are increases in		
3.	Tributary Income (\$)	There are overall increases in tributary revenue, but not statistically different between treatment and control	+	=	overall revenues, property tax revenues, and royalty revenues.		
4.	Royalties (\$)	RGA municipalities received more net royalty revenues (RGA > Control)	+	+			
5.	National Transfers (\$)						
B.	INVESTMENTS						
6.	Municipal investment (\$)	Fewer residents believe the budget is well invested	=	=	RGA generated increases in	Devote efforts to communication with	
7.	Investment with royalties (\$)	There were some increases in royalty expenditures, though not significantly different	+	=	expenditures on revenues, though there has not yet been a related increase in perceptions of responsible investment	citizens about investment.  Devote resources to the best-managed localities to maximize proper use of resources.	
C.	SERVICE PROVISION						
8.	Access to public services	Citizen perceptions indicate steady access to services, few or modest changes  Roughly 25 percent of veedurías were in each of the areas of education, health, and road projects	=	=	There was little change in access to or ratings of public services	Encourage realistic expectations among the public about the timing of improvements in quality of life.	
9.	Ratings of public services						
D.	MUNICIPAL PERFORMANCE						
10.	Fiscal Performance (IDF, %)	Some improvements in Municipal Fiscal Performance pre midline, but effects attenuated at end line.	=	=	There was minimal improvement in Fiscal Performance and signs	Identify why trainings of municipal staff members may not lead	
11.	Municipal Performance (MDM, %)	Municipal Performance increased across the board, but in relative terms declined in RGA compared to Control	+	-	of decreasing impact of RGA on Municipal Performance	to improved municipal performance	
12.	Performance of local government	Declining performance of mayors Community elites confirm poor perceptions of mayors	-	-	Perceptions of mayors poor	Continue tracking performance indicators	

CATEGORIES		FINDINGS		IM	CONCLUSIO NS	RECOMMEND .
13.	Financial Contextual Factors	Reform royalty distribution formulas (Sep. 2020) <sup>2</sup>	NA	NA		
	PARTICIPATION, TR., ACCOUNT.					
E.	CITIZEN PARTICIPATION					
14.	Easy to participate in political life	No changes in perceptions of ease of participation in politics Increasing security threats impeded participation Perceptions of closed political systems where one needs a political patron and a certain economic status to run for office	=	=	Political participation may have been stimulated by program activities but remains low due to security	Improve mayoral transparency and address security risks to community leaders to incentivize
15.	Political participation	Participation levels did not increase (RGA = control)	=	=	risks	participation
16.	Participatory budgeting	No changes in participation in participatory budgeting	=	=		
F.	CIVIC OVERSIGHT					
17.	Citizen Oversight	-RGA encouraged many new veedurias -Participation in citizen oversight committees (veedurías) was mixed -Perceptions that the JAC board improved oversight increased -There is some mismatch between oversight activities and the location of new royalty-based projects -Some mayors' office staff perceive the veedurías as "politicized" and impediments to the mayor's work	+ = + =	= + =	Some oversight committees were activated to ensure funds were well-spent and projects well-managed	Continue to prioritize citizen oversight and participation to ensure accountable public investments; educate officials about the utility of citizen
18.	Motivations to do oversight	The most important motivations for participating in oversight groups were ensuring projects meet community needs and municipal budgets are well spent	NA	NA		oversight
19.	Discouragement to do oversight	Some officials view veedurías as threatening to local politicians Security threats may inhibit participation	-	-	Security risks hurt engagement in oversight activities	Ensure a secure environment for oversight
G.	MAYORS ACCOUNTABILITY					
20.	Public accountings	Number of public accountings decreased and fell more precipitously in RGA areas Citizens report that their mayors do not adequately inform communities about their activities Citizens reported receiving little information on investment of public funds, tax collection. "We have no idea about financial activity of the municipality"  Citizens feel they have limited		-	Public accountings are still seen as ineffective, and decreased over time.	Do substantially more to encourage mayoral public accountings; current efforts not working
21.	Municipal responsiveness	impact on municipal management	=	=		
22.	Municipality takes community into account	Community leaders complain that municipalities are not resolving their most urgent needs	-	-		
	POLITICAL CONTEXT	Local elections 2015 and 2019	NA	NA		

<sup>&</sup>lt;sup>2</sup> DNP. Reform to the General System of Royalties. Sep., 2020

	CATEGORIES FINDINGS		O IM		CONCLUSIO NS	RECOMMEND .	
		New presidential administration 2018					
	TARGETING						
H.	REGIONS						
23.	Regions: Property tax (\$)	Most regions increased by endline, with Cauca increasing the most	+	+		Consider the region- specific gaps in outcomes as well as the unique contextual challenges of implementing programming	
24.	Regions: Royalties (\$)	Most regions experienced decreases in royalty revenues	-	-	Taxes and royalties changed somewhat		
25.	Municipal responsiveness	RGA associated with municipalities being perceived as more responsive in Catatumbo and Central regions	+	=	uniformly across regions		
I.	WOMEN						
26.	Who can be a leader	There is high acceptance of women as leaders across municipalities	+	+	RGA helped elevate some	Continue oversight trainings both for	
27.	Women and Oversight	Oversight trainings were also opportunities to build <b>new leadership</b> in municipalities	+	+	underrepresented individuals as possible leaders in	purposes of oversight but also for empowering	
28.					communities	underrepresented groups	
J.	ETHNIC COMMUNITIES						
29.	Ethnic C. and Oversight	Participation increased in Indigenous Mingas, but this was not a result of <b>RGA</b>	=	=			
30.	Ethnic C. and Participatory budgeting	Participation increased but <b>not in</b> participatory budgeting	=	=			
	TRUST AND LEGITIMACY						
K.	TRUST						
31.	Level of trust in state institutions	Trust in institutions remained steady	=	=	Lack of transparency	To boost trust and legitimacy, local elites should be encouraged to play a greater role in raising awareness about RGA-style programs with the general public	
32.	(Perception of) Corruption	Perceived levels of corruption remain high but are <i>decreasing</i> (RGA = Control)	+	=	remains highly salient for participation and <b>trust</b> in local government		
L.	LEGITIMACY						
33.	Confidence in Mayor's office	Insecurity and being a recent victim of a crime is correlated with less confidence in the mayor's office	-	=			
34.	Perception of municipal performance				Legitimacy: almost no change	Efforts need to be given not only to greater tax collection, but to changing the culture surrounding taxes	
35.	Attitudes about payment of taxes	Little change in attitudes about payment of taxes General erosion of positive cultures of taxation Modest evidence in support of a better tax culture	=	=	Two issues continue to hinder tax collection: informality of land ownership and "tax-evasion" culture		
36.	Paying taxes is a civic duty	Community elites suggest tax collection is not effective	-	-			
	SECURITY CONTEXT						
M.	OUTCOMES CI, C2 AND SECURITY						
37.	Participation - Security	Security issues posed obstacles to participation and programming Security conditions are correlated with increased participatory budgeting	NA	NA	Security continues to be a concern, and participation in program-related activities were	The security risks of local social leaders should be addressed so they can more	
38.	Oversight - Security	Residents were still too afraid to participate	NA	NA	perceived by some as increasing risks	safely and fully participate	

CATEGORIES		FINDINGS O IM		CONCLUSIO NS	RECOMMEND .	
		Veedurías may sometimes be perceived as dangerous Stigmatization of leadership and involvement with oversight activities was an obstacle				
N.	IMPACT ON SECURITY (short term)					
39.	Change in security conditions	Citizens and community elites see the decline in security conditions as the result of a failed peace process	NA	NA		Continue tracking security indicators to see if they improve as public works activities increase
40.	Change in feelings of safety	Perceptions of safety declined at endline; RGA not associated with feelings of safety	NA	NA	Program does have discernable effects on security	
41.	Impact of armed groups on Mayor's	Perceptions that armed groups impact decrease over time across control and treatment	NA	NA		
	CONTEXT OF SECURITY					
42.	Peace process support	Steady skepticism about the peace process Most citizens feel the peace process does not take into account their views	NA	NA		To boost sentiments of inclusion, communicate the links between programming, communication channels with local officials, and the larger peace process Withhold aid from the Colombian government unless citizen security is prioritized
43.	Armed groups free to move in municipality	Presence and activity of armed groups remains a concern	NA	NA		
44.	Afraid to travel	Citizens remain fearful of traveling within their municipalities			The peace process alleviated fears in some	
45.	Victim of crime last year	Victimization rates decreased slightly in RGA areas relative to controls	NA	NA	municipalities, creating greater openings for civic organizing and	
46.	Homicide (rate)	Homicide rates declined slightly, like a result of the peace agreement. Homicides have spiked in some areas, especially in the South and Cauca regions	NA	NA	political participation	
47.	Attitudes towards drugs and coca	There are few identifiable shifts in attitudes towards drugs, coca, or legality	NA	NA		

## Annex 4: Detailed Methodology

The technical approach in this evaluation is extensively detailed in the original statement of work and then updated in the baseline and midline reports (and their annexes). For full methodological discussion, see those documents. Below, we review the core components of the methodology with attention to required adaptations introduced at the endline. We note that municipality sampling was one of the most important considerations as we needed to identify a valid set of counterfactual municipalities that could be compared with the RGA municipalities.

#### Annex 4a: Municipality Sampling

USAID selected 40 municipalities, from an original pool of 58 that were placed on the government's national territorial consolidation plan, to receive the RGA. The Government of Colombia (GOC) provided the baseline pool, all of which had a history of violence and weak local capacity. GOC at some level

operated in the other 18 municipalities. As the RGA-intervention municipalities were already selected, the impact evaluation was quasi-experimental and focused on the selection of a useful set of "control" municipalities to compare to the "treated" RGA municipalities.<sup>3</sup>

To make appropriate comparisons, we rigorously defined a counterfactual (what would have occurred had the intervention not been implemented) and balanced possible confounding factors that could, in theory, explain the outcomes of interest. Standard regression techniques attempt to control for alternative claims, but are not well-suited to isolate the causal impact of any particular intervention because some of the control units may not actually be comparable. That is, the set of municipalities in the treated and control sets may vary in too many ways that makes a controlled comparison impossible. Without such control, establishing the causal impact of a particular intervention becomes impossible.

We preprocessed the data such that the RGA municipalities were matched on all possible dimensions to a set of comparison municipalities so that possibly confounding factors were fully balanced. That is, we had a very large pool of possible municipalities (from the approximately 1,100 overall municipalities) and used computational algorithms to identify the similarities with the RGA municipalities so that distributions of values for possible confounding factors were as similar as possible or what is termed *balanced*. The effect was that the sample, at least on observable characteristics, appeared similar to a randomized sample.

To accomplish this, we first divided cases into units with and without USAID planned intervention. Within the untreated units – a large set of possible comparison cases – we identified municipalities comparable to those that received treatment. Choosing municipalities that were not comparable would offer little analytic leverage and, instead, would muddy the inferences that we can make. To properly match treated and untreated units for analysis, we utilized a technique called covariate-balanced propensity score matching.<sup>4</sup>

We utilized covariate balancing propensity score matching (CBPS),<sup>5</sup> which permitted us to optimize the balance among covariates, such as region, and then modeled assignment to treatment. Propensity scores assigned to an observation a conditional probability of assignment to the treatment group, given a set of covariates.<sup>6</sup> A logit or probit model (treatment=I, control=0) was estimated to predict this probability, and the propensity score equaled this probability. The covariate-balanced propensity score approach has an advantage over other techniques because it is a single, nonparametric score that should be unbiased as long as important causal factors are observable.

As a general rule, with matching models it is best to include as much information as is available. Thus, there are no requirements for simple or *parsimonious* matching models. Instead, we identified as many factors as possible that could even plausibly influence the results – intermediate outcomes or overall mission objectives – and included them in the matching models.

<sup>&</sup>lt;sup>3</sup> The set of municipalities identified for treatment and control did not change over the life of the project. That said, security conditions sometimes precluded operating in collecting data in all of the originally identified municipalities. Thus, while we made every effort to preserve the integrity of the treatment and control comparisons, the information was sometimes limited. We note in the different evaluation reports – baseline, midline, and endline – where those data collection challenges entered in.

<sup>&</sup>lt;sup>4</sup> There are many types of matching, each of which produces fairly similar results, and we could have utilized a different matching approach. But the covariate-balanced propensity score matching approach is a sophisticated approach, minimizing the problems of many past approaches.

<sup>&</sup>lt;sup>5</sup> Imai, Kosuke, and Marc Ratkovic. 2014. "Covariate balancing propensity score." *Journal of the Royal Statistical Society:* Series B (Statistical Methodology) 76 (1): 243-263.

<sup>&</sup>lt;sup>6</sup> Rosenbaum, Paul R. and Donald B. Rubin. 1983. "The Central Role of the Propensity Score in Observational Studies for Causal Effects." *Biometrica* 24:295–313.

In the end, we utilized the covariate information listed in Table A4.1, which included information on past violence, population, region of municipalities, the Government's fiscal performance index, the open government index, and where USAID is already operating currently and formerly. We also included other international cooperation programs including data from the Agencia Presidencial de Cooperación Internacional de Colombia, which produced a "Mapa de Cooperación Internacional". We also identified as much information as possible from the National Administrative Department of Statistics (DANE) website, which posts a sizeable quantity of data.

Table A4.1: Variables employed in the matching

General Outcome	Variables	Indicators / Scale	Source of	Unit of Observ
	(Concepts)		indicator	
Background	Department	Dep't Tag	Colombia Gov't	
	Altitude		Colombia Gov't	Municipality
	Ruralness	Percent rural (0 .002 – I )	Colombia Gov't	Municipality
	Government consolidation muni	Yes (1) No (0)	USAID	Municipality
Violence	BACRIM Presence	Yes (I) No (0)	Instituto de Estudios para el Desarrollo y la Paz	Municipality
	Fatalities from Attacks	0 – 105	CDMH	Incident
	Paramilitary Assassinations	0 – 335	CDMH	Incident
	Homicide Rate	Number per 100,000 (0 - 508)	CEDE	Municipality
	Guerrilla Attacks	0 – 291	Vargas	Incident
	Clashes	0 – 130	Vargas	Incident
Demographic	Minority Population	Percent of the population that is minority (0-1)	Census	Municipality
	Distance from Dep't Capital	Distance in km (0 – 493)	CEDE	Municipality
	Infant mortality rate	Average per 1,000 live births (7.6 – 91.97)	Colombia Ministry of Health	Municipality
	Education facilities	I – 2,721	CEDE	Municipality
	Debt magnitude	0 – 99.4	CEDE	Municipality
	Distance from nearest market	Distance in km (0 – 926)	CEDE	Municipality
Economic	Remittances	Total value since 2012 (5.6 – 15.9 billion)	SGR	Municipality
	Dead from mine incidents	Total since 1990 (0 – 68)	Colombia Gov't	Municipality
	Coca Production	Hectares (0 – 5,464)	UNODC	Municipality
Political	Corruption risk	Ordinal risk score (0 – 3)	Fundación Paz y Reconciliación	Municipality
	Fiscal Performance	Effective operating budget (314 – 1,966,462)	Colombia Gov't	Municipality
International Involvement	USAID Activity	Yes (I) No (0)	USAID	Municipality
	World Bank Program Activity	Yes (1) No (0)	World Bank	Municipality

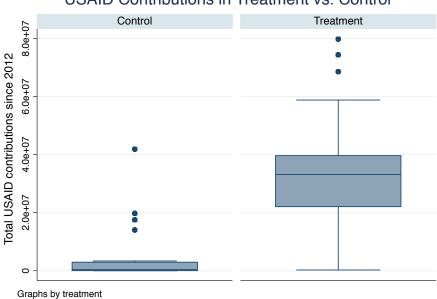
Including all of this information, in brief, we developed a single score for the likelihood that a unit would receive treatment. That score "in expectation" balanced all possible confounding factors that we could observe. Once covariate-balanced propensity scores were assigned to all possible units, we compared pairs of treated and untreated units with similar propensity scores. These comparisons approximated those that would occur in a randomized experiment to the extent that relevant factors were observable.

A naïve strategy would have been to identify every possible municipality in the country and then include all possible information about those municipalities in a matching process that cuts down the number of cases. Such an approach would naturally include control units in conflict-affected areas that we would have cared about comparing. But the matching process also included some municipalities outside the scope and interest of USAID. We thus began with the baseline set of municipalities (greater than the 80 used in the selection process between USAID and GOC) in the departments of interest to USAID. Using that set of possible municipalities, we gathered as much data as possible and estimated propensity scores and created the final set of matches.

We used structured matching to provide a final set that included the 40 RGA-treated municipalities and then another set that experienced neither USAID nor GOC interventions. Such an approach allowed us to make comparisons among municipalities with and without USAID involvement, which was of primary interest.

The statistical matches were largely comparable, but a few exceptions existed. Most critically, the data on historical USAID development assistance across municipalities pointed to a tendency towards continuity of programming. This posed challenges from an evaluation perspective because the data showed that RGA treatment municipalities had historically received much higher levels of USAID programming and financial support than the control municipalities. This previous "priming" of treatment municipalities means that any RGA program effects need to be qualified by acknowledging that the effects were due to the RGA plus prior programming. See Figure A4.1, which demonstrates this using data from the USAID MONITOR system. We tried numerous possible ways to balance treatment and control municipalities on this dimension but there were not sufficient possible control municipalities with substantial USAID operations. Thus, the treatment and control groups are mostly imbalanced with respect to this covariate.

Figure A4.1: Prior USAID Activities in Treatment/Control



#### USAID Contributions in Treatment vs. Control

One implication of USAID's past heavy involvement in treatment municipalities is that citizens should be more likely to report that they are aware of current RGA activities. When asked knowledge/awareness questions, citizens often lie and we expected some level of citizens saying they were aware of the RGA. But if past activities shape citizens beliefs, then we would have expected citizens in treatment municipalities to report knowing about the RGA. Curiously, throughout the entire activity, despite past and current USAID work, very few citizens reported knowing much about RGA.

The final set of treatment and control municipalities are illustrated below in Figure A4.2 (See SOW or baseline reports for lists of the treatment and control municipalities.)<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> USAID has worked extensively in many of the municipalities previously. Thus, the RGA intervention is not a clean, first-time intervention. While we used matching to identify control municipalities that were similar, USAID has had an overall stronger historical presence in the treatment areas, thus making for a less than optimal balance across these municipalities. We specified USAID history in the matching model different ways and no matter the approach, the matching results were similar.

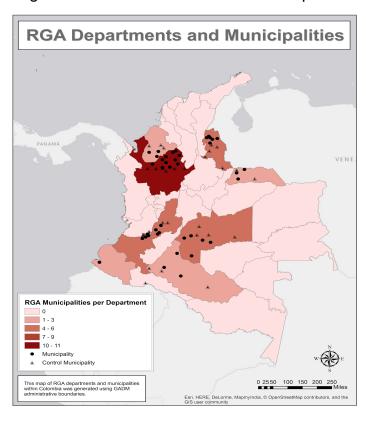


Figure A4.2: Treatment and Control Municipalities

See attached document ("A.4.Sampling-Procedures-English.pdf") for more details about the survey sampling procedures. Also see Annex 6 below for more information on sources of information.

## Annex 4b: Analysis

To interpret the results, we plotted the quantitative data in figures and provide visual interpretation. In most cases, this involves comparing changes in control from baseline to midline to endline, and then changes in treatment from baseline to midline to endline, and then comparing across control and treatment. To contextualize these comparisons, we also estimated statistical regression models comparing

outcome indicators in treatment municipalities to outcomes in control municipalities at the endline (which essentially produces a difference-in-means estimate), and then control for the midline and baseline values (Glennerster and Takavarasha 2013), clustering survey respondents, where appropriate, on municipalities. Throughout, we refer to these results as "statistically meaningful" (or not) based on whether the regression analyses suggest that the results could not have occurred by random chance. Given the small number of municipalities, these regressions provide a difficult test, and so the visual interpretation is all the more important as well as supplementing with the qualitative data. (The full set of regression results is reported in Annex 2d, Table A2.9.) Given that not many of the relationships are "statistically meaningful" we primarily draw attention to the analyses in the cases where they are.

We note two challenges that shape our analysis, discussed further in the baseline and midline reports. First, due primarily to security concerns, the implementing partner was not able to begin operations in all 40 treatment municipalities at the same time. This was especially true at baseline, but persisted through midline to some extent. As such, we attempted to quantify the varying implementation efforts across municipalities by considering variation in the data on MSI's activities as well as through USAID's MONITOR tracking data. All regression results are weighted by RGA effort according to these measures. Second, the security conditions prevented us from conducting all evaluation activities in all treatment and control municipalities. Because of worsening security conditions, especially at baseline and midline, but to some extent at endline, data coverage was mostly comprehensive but with some gaps that we have discussed at least qualitatively along with some targeted analysis for Arauca.

#### **Annex 5: Instruments**

See attached document ("A.5.Instruments.zip") for the survey, interview, and focus group instruments.

#### Annex 6: Sources of Information

We successfully collected data in most municipalities. Security concerns prevented us from collecting baseline data in Arauca, though we were able to collect midline and endline data for Arauca with a shortened survey instrument, and have included a separate subsection in the main report, and more information below dedicated to the Arauca findings. At endline, we did not have any major security incidents, though we did find that many people were concerned about reporting and did not want to respond to some questions. Thus, there was a general atmosphere of insecurity that likely shaped reporting on many survey questions of interest.

Most of the data collection occurred at the municipality level and entailed conducting household perception surveys, interviews with elites, focus groups, document review, and collecting other observational data. The survey, interview, and focus group questionnaires are located in Annex 5. The survey firm, Cifras y Conceptos, carried out the data collection. Ahead of the endline collection, we revised the instruments and worked with Cifras y Conceptos to develop all training procedures. Before baseline, midline, and endline, we conducted pilot surveys based to refine questions for the final data collection. The evaluation team also made site visits to several municipalities during each of the baseline, midline, and endline waves. For the endline, site visits occurred in Tolima Department (RGA municipality of Chaparral), where the evaluation team observed focus group and survey data collection.

The within-municipality sampling procedures are detailed in Annex "A.4.Sampling-Procedures-English.pdf". We originally planned to conduct 7,000 surveys at the baseline, midline, and endline surveys for a total of 21,000 surveys. In the baseline, security challenges prevented us from operating in all municipalities (see

discussion in baseline report), so the final count of surveys ended up being 6,389. In the midline, we attempted to compensate for the previous shortage of baseline surveys. As such, in the midline, we surveyed additional respondents in Arauca, and in total surveyed 7,007 respondents for the midline. For the endline, we completed surveys with 6,692 for an overall total of 20,088 with a final set of 20,002 useable observations.<sup>8</sup>

Surveys were conducted in the municipality centers (cabeceras) as well as other smaller population centers (centros poblados) around the municipality, which capture a rural component, though the surveys are not fully representative of the rural areas as we were constrained in the number of rural areas we could capture. For the endline, we sought to generate a panel of repeat respondents through several sampling approaches. We first attempted to survey the same individuals we had previously surveyed in both the baseline and midline. If that was not possible, we attempted to resurvey individuals who previously participated in either the baseline or the midline surveys, but not both. If that was not possible, then we checked whether the individual previously surveyed had moved to another municipality or department and tried to survey them there if possible. If that was not possible, we asked to survey someone else in the same household as in one of the previous surveys. Failing that, we resampled new respondents from the same municipalities but in different houses. The full distribution of sampling and resampling, along with percentages in each category, is reported in Table A6.1.

Table A6.1: Distribution of endline respondents

Panel I	Panel 2	Panel 3	Panel 4	Panel 5	Panel 6	Total
1,914	1,320	754	582	2,117	5	6,692

- I. Same person in both baseline and midline measurements
- 2. Same person who responded in one of the measurements
- 3. Same household, different person
- 4. Same house structure, new family/person
- 5. Same street/block within a municipality
- 6. Same person who responded in baseline or midline, but not in different municipality

As with the baseline and midline, in the endline we also collected data from other sources.<sup>10</sup> In addition to the citizen survey, we also attempted to conduct interviews with three government officials in each

<sup>&</sup>lt;sup>8</sup> Although there were minor security incidents at baseline and midline (see those reports), the endline data collection did not face any significant security incidents. However, the security environment had deteriorated across the country. Respondents were fearful and there was a widespread refusal to answer questions that were even borderline sensitive. Arauca was a consistently challenging department in which to access and collect information, and we adapted the survey instrument accordingly since respondents would not answer a variety of sensitive questions.

<sup>&</sup>lt;sup>9</sup> The issue of urban/rural representativeness within municipalities was discussed with USAID ahead of the baseline, and it was clear that USAID could not support a larger evaluation that would be representative of the rural areas within municipalities. As such, USAID encouraged the evaluation team to sample from some centros poblados, though not in a representative way.

<sup>&</sup>lt;sup>10</sup> Measuring perceptions is a standard technique, and improving perceptions is a central desired outcome of USAID's programming, and the theory of change articulates its importance. Based on the initial tasking: "The purpose of the RGA is to improve sub-national governance in 40 conflict-affected municipalities of Colombia. Municipal capacity to effectively deliver services to citizens plays a key role in building the legitimacy of the state at the local level. Given that the lack of state legitimacy at this level contributes to conditions that foster or

mayoral office, six elites within the community (e.g., within social accountability organizations), and focus groups. We were not always able to achieve that coverage given that some leaders would not agree to meet or were otherwise difficult to contact. In total, we were able to conduct 290 elite interviews. The mission and implementing partners determined not to target specific areas, but rather pursue broad community effects. As such, we could not identify specific neighborhoods, centros poblados, social and government leaders, or otherwise, ahead of time to collect baseline data. We were told that those decisions would not be made until much later, so we were left doing random and/or arbitrary selection of local leaders and centros poblados.

We also conducted focus groups to better understand citizen perceptions, including their views on municipal spending and oversight, and general governance and security conditions in the municipalities. The focus group questions were adapted from the citizen questionnaire. Through the survey firm Cifras y Conceptos, we conducted 20 focus groups for each of the baseline and midline reports, and repeated those focus groups for the endline, though not with the exact same set of individuals. As such, the focus groups do not constitute their own panel, but rather a new sample albeit within the same set of municipalities at baseline and midline.

Finally, we also collected administrative information from publicly available sources and included those indicators as appropriate to compare to the baseline and midline conditions. Specifically, we collected administrative data on indicators of interest from national government agencies and directly from municipalities, including site visits and on-the-ground observations. Observations for some indicators vary in coverage from about 40 to 70 municipalities since we were not able to acquire data for all the municipalities in the sample.

In sum, we collected an enormous amount of data across a variety of sources and over time. In the findings sections, we analyze the data to provide supporting evidence and illustrative material. All data have been anonymized for security reasons.

See original statement of work, and earlier waves of the evaluation, for longer discussions of sources of information.

## Annex 7: Evaluation Statement of Work

See attached document ("A.7.RGA IE-SOW 27 March 2015 signed.pdf") for initial statement of work.

## Annex 8: Summary Information about Evaluation Team Members

Michael G. Findley is Professor of Government and Public Affairs at the University of Texas at Austin. Findley conducts research on political violence, international development, and international law, with extensive fieldwork in Colombia, Kenya, DRC, Sudan, South Sudan, South Africa, and Uganda. His publications appear in leading scholarly and policy journals and presses. He works extensively in

perpetuate conflict, increased legitimacy will contribute to minimizing conflict." Note that legitimacy is a perception-based characteristic. And the tasking also asked for due attention to issues of trust. And so on. There are of course potential biases with perceptions data, which is why we included other forms of data. That was the aim of introducing administrative data, interview data, focus groups, etc. Relevant administrative indicators of revenues, spending, and service provision should help to account for inefficiencies in municipal performance, as should the DNP indices in the analysis.

collaboration with various policy organizations including the World Bank, USAID, African Development Bank, UNICEF, UN Peacebuilding Fund, UN Development Program, International Aid Transparency Initiative, and many developing country governments to promote evidence-based policymaking. Such work has resulted in numerous impact evaluations (and reports), policy publications, official policy working papers, and policy reviews.

Oliver Kaplan is Associate Professor at the Josef Korbel School of International Studies at the University of Denver. He is the author of the book, "Resisting War: How Communities Protect Themselves" (Cambridge University Press, 2017), which examines how civilian communities organize to protect themselves from wartime violence. He was a Jennings Randolph Senior Fellow at the U.S. Institute of Peace and previously a postdoctoral Research Associate at Princeton University in the School of Public and International Affairs and at Stanford University. His research has been published in The Journal of Conflict Resolution, Journal of Peace Research, Conflict Management and Peace Science, Stability, The New York Times, Foreign Affairs, Foreign Policy, CNN, and National Interest. Kaplan received his Ph.D. in political science from Stanford University and completed his B.A. at UC San Diego.

Ana Marrugo is a graduate student of anthropology at the University of Pittsburgh. Her research focuses on the workings of transitional law in Colombia and its implications for movements for social justice in the country. She worked at the Victims' Unit in Colombia strengthening victim's organizations abroad and in the creation of strategic alliances with international partners to assist victims living outside of Colombia. She has also worked as a consultant for projects of national and international agencies in political participation and development in Colombia.

**Alejandro Ponce de Leon** is Ph.D. candidate at the University of California, Davis. Ponce de Leon conducts research on culture, political violence and agricultural policies in contemporary Colombia.

**Danny Walker** is a data specialist who has worked with USAID, UNICEF, the IMF, and the World Bank on a wide variety of quantitative initiatives. These have ranged from ethnic fractionalization in Indonesian, to civil service wage bill in Brazil, to crowd-sourced SMS messages in Uganda, to an index of municipal characteristics in Colombia for this present project. In each case, Danny's career interest is in how data and analytical insights can aid in international development, reducing civil unrest and violence, and alleviating poverty. He currently resides in West Hartford, Connecticut.

Joseph K. Young is Professor of Public Affairs and International Service at American University in Washington, DC. Young conducts research on political violence, governance, and public policy with field work in Latin America and the Middle East. His publications have appeared in top journals in political science, economics, international studies, criminology, and Latin American Studies. He has been invited to speak to organizations in the defense community and has consulted on a Department of Defense initiative focusing on countering violent extremism. The National Science Foundation and the National Consortium for the Study of Terrorism and Responses to Terrorism (START) have funded his research.

# Annex 9: Statement of Differences (when applicable)

Not applicable