

IDIN Summer Research Fellowship  
Final Report

Understanding the relationship between place-based  
economic development strategies for innovation and  
inequality: The Innovation District in Medellin, Colombia.

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## **PART 1: Summary of Research Conducted**

This research focused on understanding the relationship between place-based economic development strategies (PBEDS) and inequality in Medellin, Colombia. It consisted of a series of interviews and site visits during July 2017, as well as a review of relevant documentation produced by Ruta N, the local innovation agency in Medellin.

### **Research Focus and Objectives**

The final focus of the project evolved as I became more aware of the challenges that the Medellin Innovation District (MID) is facing in terms of generating economic inclusion for the communities in the four neighborhoods surrounding Ruta N. Understanding how a place-based strategy is advancing economic inclusion for the immediate community became the focus of this research, as well as understanding how economic and political shifts affect the outcomes of these strategies.

Initially I expected to find information that would allow me to assess how effective these economic inclusion strategies were. However, through the interviews and after working sessions with the team in charge of the Innovation District, it became clear that investigating the community engagement process and the economic diagnostic phase of the project could provide more insights about Ruta N's approach on economic inclusion and advancing economic democracy.

### **Research Activities**

I took a mixed qualitative and quantitative approach to this research, relying on a set of semi-structured interviews (10), conversations, and working sessions with the Innovation District team (2). During my stay in Medellin, I was given access to information about the Innovation District design and implementation phases. I was also provided with a permanent workstation in Ruta N's complex. Most of the interviews were conducted in Ruta N, except for three of them that were held in the University of Antioquia, a local business, and in "Milla de Oro", the city's emerging financial and business district in the south.

70% of the interviewees were Ruta N employees, including Ruta N's Executive Director, the Director, lead for Community Engagement, Social Worker, Business Attraction, and Urban Development lead for the Innovation District and Finance and Capital lead for Ruta N. 20% the interviewees were residents from the surrounding neighborhoods, both very active during the public outreach phase of the project. The remaining 10% include a former Executive Director, now national Director for Innovation for the largest Business Guild in Colombia.

These were semi-structured interviews that covered a set of topics and questions previously introduced to interviewees by email. All the conversations were recorded, upon agreement to a Consent Form.

### **Research Findings**

#### **Changes in management and government.**

Since its launch in 2009, Ruta N has had 4 Executive Directors. They have been appointed by the Board of Directors that includes representatives from the local administration, the Public Utilities Company (EPM)

and the private sector. There are no representatives from local community or advocacy groups in the highest decision-making scenario of the leading innovation agency in the region.

Across my interviews, it was clear that changes in management have had a significant impact on Ruta N's approach on addressing inequality and social change. Every tenure at the Executive Direction has had a specific focus, and internal re-organization and prioritization has occurred every 2-3 years. The first phase is characterized by concentrating efforts on establishing Ruta N as an independent organization, which spun-off from EPM's innovation division. This includes the first 2 years (2009-2011) in which the Ruta N complex was conceived and built. Political support from Mayor Alonso Salazar was critical and allowed the emergent corporation to access resources and expedite public planning processes to ensure the Ruta N complex could be ready by 2012. It is also during this period that Ruta N incubated the idea of transforming the neighborhoods around the Complex into a "16 hectares knowledge business center for hosting local and international technology-based companies in the Energy, Health and ICT sectors"<sup>1</sup>.

The following tenure at the Executive Direction is considered by staff as a pivot point for Ruta N. During this period between 2011 and 2013, Ruta N's assets and equity tripled (See Graph 1), with significant increases in transfers from the local government and EPM. This coincides with a new local government that harnessed Ruta N's programming and the Innovation District, as the main economic development policy for the city. During this period of rapid transitions and growth, Ruta N developed the Science, Technology, and Innovation Plan for 2011-2021, the main public policy supporting its programming and providing institutional support regardless of the changes in government. Interviewees also acknowledge this period as critical for the Innovation District as it includes the design phase with consortia of consultants including MIT faculty, Accenture, and world-renowned Architecture firms. However, this period is also marked by the absence of strategies for economic inclusion and overcoming inequality.

The period between 2013 and 2015 leverages on this economic growth and expansion and consolidates Ruta N's leadership in the innovation ecosystem in Medellin. With economic and political support from the local government, new leadership at Ruta N focuses on leveraging anchor institution's capacity to advance collaborative projects. This is the point where Ruta N reaches its highest investments, equity and expands their programming to include social and community-oriented innovation processes. They focused their capacity building programs in "democratizing innovation"<sup>2</sup>, and launched innovation festivals and co-creation platforms for civic engagement under the "Medellinnovation" brand. However, the narrative of inclusion and expanding the impact to marginalized communities was more rhetorical than practical. Economic development strategies continued to focus on improving R+D processes and developing business' capacity to innovate. By the end of this phase, however, Ruta N had to face significant backlash and public protest as they tried to socialize the urban renewal/transformation plans for the three neighborhoods around the Complex. This contentious relationship with immediate communities forced the Innovation District team to reevaluate their community engagement strategy, which will be discussed later.

The current leadership at Ruta N coincides with a new local government. With new priorities set by a new development plan for the city, Ruta N seems to not be the leading interest for economic development in the city. This is backed by the drastic change in tendency to grow financially, which is shown by Graph 1. However, it has been noted by interviewees that the capacity that Ruta N has to advance its programs and projects is becoming less dependent on executive leadership thanks to solid foundations, capacities

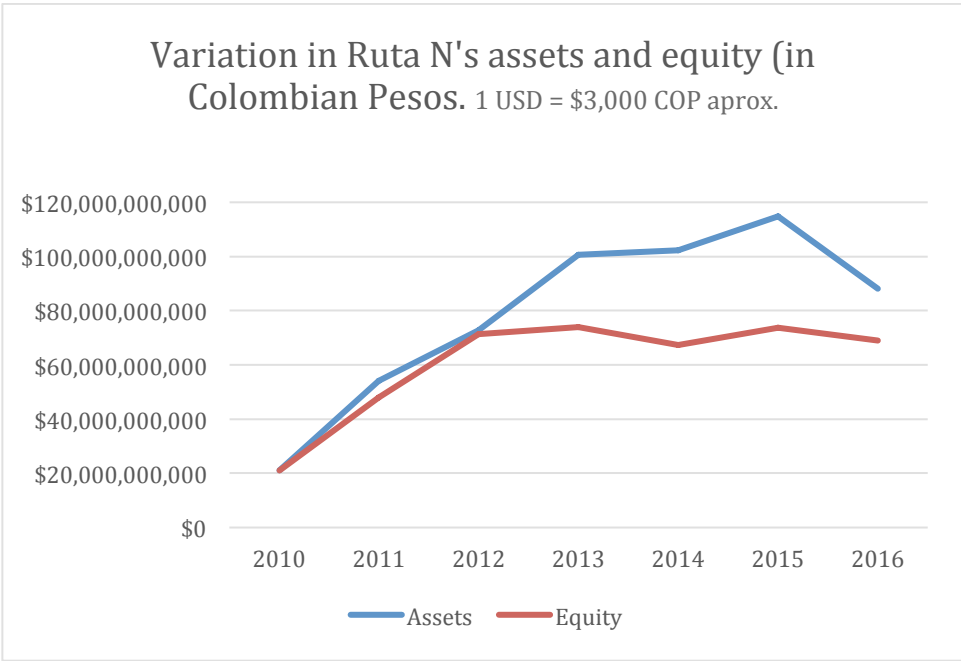
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<sup>1</sup> Corporacion Ruta N Medellin. Informe de Gestion 2010.

<sup>2</sup> Corporacion Ruta N Medellin. Informe de Gestion 2014.

within mid-level management and staff and strong collaborations with anchor institutions. This new leadership however, did overhaul Ruta N’s overall strategy to include social and civic innovation as a component of the economic development strategy. This has effects on how projects are conceived and how investment is prioritized, which is key given the downfall in transfers from the city and EPM.

Given Ruta N’s intimate relationship to the public sector, it’s relationships with the mayor’s office have been enablers and barriers for success. Interviewees have expressed how challenging it has been to convince the city that the District is not a project that belongs to a specific mayor or government, that is a city-wide initiative. Additionally, the relationship between Ruta N’s executive director and the mayor in office has been deemed as critical and fundamental for advancing Ruta N’s goals. Besides regular transitions and onboarding processes, interviewees claimed that “the only employee that has changed with every new mayor is the Executive Director” and that “projects have been able to stay away from politics”. The relationship with the Mayor has been characterized by interviewees as “perverse”



Note that 2011, 2013, and 2016 are the changes in Ruta N’s executive leadership. 2012 and 2016 are changes in the Mayor’s office. This confirms what some interviewees highlight as the importance of having a good relationship with the Mayor’s office and being a priority in the city’s economic development agenda.

**Unlocking Landing’s potential.**

*Landing* is Ruta N’s program for facilitating the arrival of international and domestic companies into the innovation District. By offering office space within the Ruta N complex at below-market rates and connecting them to the Innovation Ecosystem, the objective is to attract talent and businesses to strengthen the ecosystem. It is jointly operated with ACI (Medellin and Metropolitan Area Investment and Cooperation Agency) and is designed to work as a platform for enabling knowledge and technology-based businesses to quickly start their operation in Medellin.

Despite having 168 companies<sup>3</sup>, of which 45% of them are international, with 3.915 qualified jobs (Which according to interviewees are around 2.5x the average salary in Medellin), the Landing program is not seen as a driver for economic inclusion yet. Most of the employees, as mentioned by interviewees, are well established professional in their fields of work and there is no data on how many of the almost 4,000 new jobs created are in fact new jobs or simply transfers from other companies.

The following map is a snapshot of an [online visualization of the companies in Landing](#) developed during my time in Medellin. This prototype shows the 168 companies located in Ruta N and provides descriptions of their areas of work.



**Next Steps for research**

There is an opportunity for generating data and analyzing the role that Landing companies are playing in the local economy and co-designing strategies that leverage businesses’ purchasing power to strengthen the economy of the neighborhoods around the Ruta N Complex. By analyzing data about the labor market, the requirements that incoming companies have, as well as the local offer, it is possible to create scenarios where the local economy is strengthened.

<sup>3</sup> As of July 12, 2017.

The question about the means for advancing economic inclusion in the District still remains unresolved. Whereas this does not seem to be a priority for Ruta N’s agenda, as this is becoming more robust in terms of working with well-established companies and strengthening innovation processes at that scale, it is a priority for the network of institutions coordinated by the Innovation District direction. Leveraging the power of those anchor institutions might counterbalance the shift in priorities that occur in Ruta N, mostly influenced by the local government.

**PART 2: Findings Related to Local Innovation**

**Understanding Local Innovation**

To advance economic inclusion through place-based economic development strategies, it is important to conduct a systemic analysis of what are the market forces in place, the assets that communities, businesses, and institutions have. Due to the Innovation District’s implementation plan defined by Ruta N, and as part of the Colombian regulation on urban development processes, they had a mandate to include communities’ input into the final design and implementation process. However, given the transformation that the District is aiming to bring upon to the area, the process of community outreach and co-creation was set as a priority between 2015-2016. This strategy constitutes a local innovation process itself, which will be discussed later.

Interviewees claim that the outreach process, which began with a Census and the development of outreach and participation strategies, was a tipping point for the District project as it confronted the planning team with a reality that not everyone was acquainted with. By analyzing the assets that the local communities have in terms of capacities, the rich cultural and social networks that are embedded to the neighborhood territory, and most importantly, by being aware of the disconnection between Ruta N as an institution and the community surrounding it’s complex, the District Planning Team could envision alternative strategies for co-creation.

This type of “reality check” is mentioned as critical in developing economic inclusion strategies as it confronted an institution with the real economic systems that are in motion in the area. By understanding the challenges that local businesses face and the disconnect with Ruta N’s overall mission, it became clear for the District planning team that economic inclusion could, and in fact, should be the focus of their programming looking forward.

This process also led them to re-evaluate Ruta N’s strategy for inclusion, which had been initially part of their culture of innovation strategy, so that it could consider a more local economic development approach. By understanding more about place, and the role that anchor institutions play, Ruta N is now positioned to leverage their purchasing power for closing the gaps in the local economy. With such concentration of wealth and resources in this area of the city, it not only makes sense for the local community to benefit, but it could become an innovative strategy for advancing economic democracy.

## Local Innovation Processes

### Public outreach and participation

As mentioned before, the Innovation District's strategy for community outreach and engagement constitutes as a local innovation process (Figure. 1) given the level of sophistication and commitment to not just inform but actively engage local communities in deciding the future of the project. It consisted of two phases: recognition and collective construction, and a cross-cutting sustainability element.

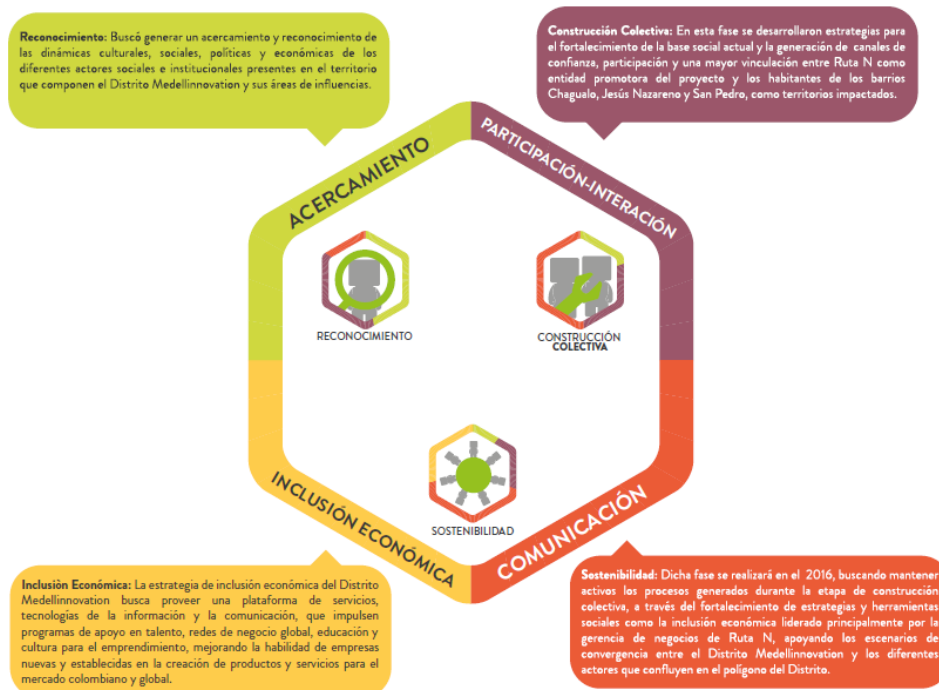


Ilustración 8. Metodología de gestión social Distrito Medellíninnovation. Ruta N 2015

Figure 1. Innovation District Community Outreach and Engagement Strategy. Source: Ruta N.

As we can see, economic inclusion (in yellow) is one of the components of the strategy, which indicates a level of sophistication in terms of methodology.

The territorial recognition phase started in 2014 and included activities such as territorial tours, interviews, interviews with community media, observation tours, meetings with local community councils, innovations bazaars, community galleries, creative lunches, urban activities, interviews with youth leaders, meetings with social organizations and institutions, focus groups, and co-laboratories. The following is a schema of this phase.

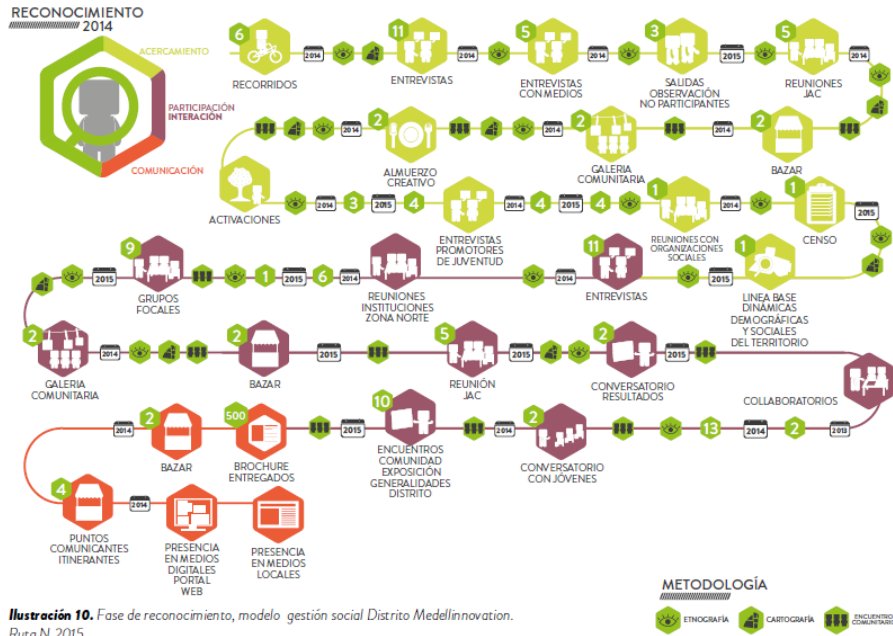


Ilustración 10. Fase de reconocimiento, modelo gestión social Distrito Medellíninnovation. Ruta N 2015

Figure 2, Territorial recognition phase

The collective construction phase started in 2015 and included activities such as tours, meetings with local community councils, training sessions, community proposal workshops, neighborhood poster sessions, digital strategies, iterative communication stations, a permanent space for inquiry in Ruta N and a community media outreach. The following is the flow of activities for that phase.

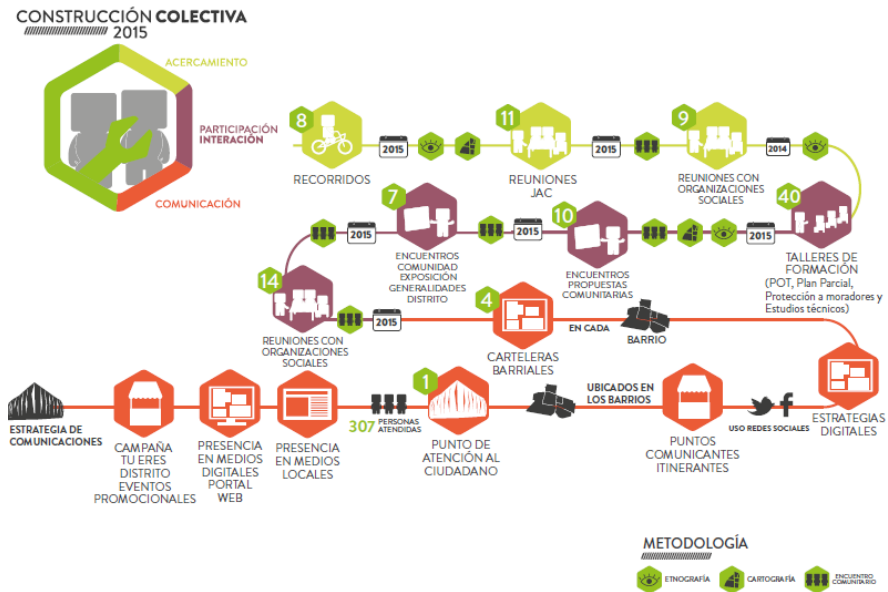


Ilustración 11. Fase construcción colectiva, gestión social Distrito Medellíninnovation. Ruta N 2015

Figure 3. Collective Construction Phase



After hosting regular meetings at different neighborhoods, the team received 85 community proposals, of which 32 were incorporated to the development plans for the District (38%), another 32 were slightly adapted for inclusion, 16 of them were remitted to other city agencies and only 5 of them were discarded. One of the challenges identified after implementing this strategy is about economic inclusion. It states that the District should prioritize “establishing economic inclusion policies by formalizing those activities that are being carried out in the neighborhoods through their articulation to the science, technology and innovation strategies”.

### Local Innovators

I interviewed Bela Lopez, owner of Vegetarian, a restaurant located within 2 blocks of Ruta N. Bela participated in a program called *Open Kitchen*, which is an economic development strategy for restaurants in the Innovation District. This program, which operates similarly to a social innovation accelerator, is looking to strengthen local restaurant’s capacity to leverage the implementation of the Innovation District to improve their livelihoods. *Open Kitchen* is also designed as a place for creating knowledge about local gastronomy and building solidarity networks in the restaurant industry.

Bela’s story provides insights about the potential for transforming traditional industries and leveraging local assets to advance economic democracy. She mentioned that along with her husband, they decided to move to the North area of the city (where Ruta N is located) because she saw the potential for transformation and were aware of the opportunities that it presented for entrepreneurs, well before Ruta N was even established. They’ve witnessed the transformation over the past 5 years and have also developed a love-and-hate type of relationship with Ruta N. Both Bela and her husband are very active in organizing local businesses to build collaborations that can allow them to compete against food chains and recently established shopping malls with food courts. *Open Kitchen* allowed them to understand the value of collaboration and leveraging collective assets to strengthen local economies, which is, according to Bela, the hardest challenge she faces as a restaurateur.

*“If we wouldn’t been part of Open Kitchen, I can tell you that we wouldn’t have built relationships with local institutions such as the Botanical Garden. We now have an exclusivity contract with them and supply them with our food. This was a connection done by the District, Open Kitchen, and the restaurants. This is how we are making relationships in the neighborhood”<sup>4</sup>*

Their perspective on the Innovation District and Ruta N in general varies from cautioned optimism to skepticism. However, they do acknowledge Ruta N’s intention of including small businesses in their economic inclusion strategy for the District. They are also fully aware of how their neighborhood is becoming gentrified due to the influx of companies, start-ups and real estate developers that are massively buying land and properties ahead of the boom that the District is already generating.

*“We are not getting anything from Ruta N now. But we (restaurants part of Open Kitchen) continue to meet. We pool money to pay professionals to come and do more capacity building for us. We are not dependent on the support from Ruta N any more. We use our restaurants now and meet. We share expenses and capacities. My lawyer is now everyone’s lawyer”<sup>5</sup>*

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<sup>4</sup> Interview with Bela Lopez on 6/29/2017.

<sup>5</sup> Ibid.

This emergence of collaborative networks is a significant step towards advancing economic inclusion and self-determination. Even when the challenges that local businesses face is systemic and at-large, the fact that once unarticulated businesses have started to combine efforts is a sign of social capital and community wealth.

### Enabling Ecosystem and Stakeholders

The North Zone of Medellin concentrates many institutions in the education, culture, and healthcare sectors. The Innovation District's economic development strategy has identified 15 institutions that are critical in moving forward with the transformation process. These include Universidad de Antioquia, the largest public university in Medellin and second largest in the country, a cluster of hospitals and clinics led by Hospital San Vicente, the city's Botanical Garden, Parque Explora, the University Research System and the Moravia Community Center, amongst other.

This concentration is one of the District's main levers for change as explained by different interviewees. Even though breaking barriers for interinstitutional collaboration has been a task which has taken longer than expected, there are some cases where conditions have allowed for collaborations around R+D, collaborative project funding, cross-institutional procurement, and interinstitutional programming. As far as the Innovation District goes, getting Universidad de Antioquia to be on board and assume their role as anchor institution for the local ecosystem has been the most challenging issue. According to recent interviews, recent changes in University leadership have facilitated this conversation and there is optimism. The following quotes are evidence of this renewed optimism:

*"With local institutions, we've gain ground. They have started to connect with the District and with the need of having an Innovation District. Universidad de Antioquia has just recently decided, in an executive leadership decision, to place a bet in the District. We still have work to do with institutions but we are now focused on identifying projects that we can collaborate on. We did a study of the services and capacities that each institution brings to the ecosystem and are starting to translate that into association possibilities. If we work together we will have more impact"*<sup>6</sup>

*"We achieved something and is to get Universidad de Antioquia involved. They've stated that they want to be part of the implementation vehicle. This makes total sense given that they are not just the biggest land owner in the District, but because we've seen the role of universities in triggering innovation as sources of knowledge. What would be of Cambridge without MIT and Harvard and without their commitment to local development? Why is Boston's Innovation District so odd? Because it's missing a university"*<sup>7</sup>

Another aspect of the Innovation District that highlights the importance of engaging multiple stakeholders is what they've labeled the "implementation vehicle". In order to have more impact, get buy-in from different institutions, as well as generate some level of independence from Ruta N and the city, a high level committee was established to be the ultimate decision-making scenario. This "Strategic Direction Committee" oversees strategic processes and resource allocation. They inform a Technical Coordination Committee which incorporates technical staff from the Redevelopment Authority, the Economic Development office, and the Planning Office for the City.

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<sup>6</sup> Interview with Ivan Rendón on 6/28/2017.

<sup>7</sup> Interview with Paulina Villa on 6/29/2017.

Financially, this implementation vehicle operates as a trust, independent from the budget allocated to Ruta N and the ones managed by the agencies involved. The team in Ruta N in charge of the District, however, maintains most of the votes in the Strategic Direction Committee, which is according to Paulina Villa “a way to safeguard the original intent of the District”.

Another important reflection is about the opposition to the Innovation District that has risen because of the community outreach process. During my interviews, I had the opportunity to talk with a community leader who has radical postures about Ruta N and the development model that it promotes. Even though he acknowledges Ruta N’s interest for engaging with the public, he doesn’t believe that this process influences decision-making. This are some of the quotes that show the level of discomfort, lack of trust and some limited optimism towards the next steps.

*Institutions come here and confess what they’ve done. With that information, they define next steps, approve, dictate. This is the situation I perceived with Ruta N since the beginning and is the reality that we are facing now”*

*“Then they show up with activities for dissemination to get our approval to move along with the project. They just stuck to what the law required, independently of what communities need. They didn’t convince us, they were able to impose and in that process, ended up radicalizing some leaders in the area”*

*“On the other hand, they told us that ‘innovation will improve your economic condition’. This is rhetoric and there is no actions to back it up. People become wary of this and won’t believe what they say easily. There is no coherence between what’s been planned and what people are seeing in the streets. This is because these projects are thought 50-100 years in advance, so it’s a development and transformation that we won’t be able to see”*

On the other hand, the staff in Ruta N in charge of community outreach remains positive about the results of the public participation process. One staffer was critical in saying that “Ruta N needed a dose of reality” and how interacting with community leaders came as a shocking and somewhat “frightening” process to technocrats that had never been involved with grassroots organizing. This process did generate meaningful lessons for Ruta N, to the extent that it’s now re-thinking the social function they serve as the leading institution for knowledge-based economic transformation. By developing new language, becoming more aware of the communities surrounding the Ruta N complex, the public participation process ended up being a two-way learning exercise for both Ruta N and the community.

### **PART 3: Lessons Learned and Recommendations**

*Please share any challenges you encountered in implementing your research as planned, either from a practical standpoint or a standpoint of research methods.*

Ruta N is an organization that’s open to collaboration and provides opportunity for research. They have collected significant amounts of data about the innovation ecosystem and are willing to explore collaborations that leverage that data to improve decision-making and tailor programs that will have more impact.

Interviews provide a good insight into where projects are and what are the challenges they face. However, I believe this is a research method that depends on the level of trust you can build with the interviewee, which in my case was very high due to my previous experience working in Ruta N in 2013.

*If another student were to conduct a similar project, what would be several key recommendations you would make, based on your experience this summer?*

I would recommend spending more time in Medellin and get to know what are the underlying structures that shape its local economy. Behind all that marketing capacity and branding that has allowed them to attract companies and entrepreneurs, there are local economies that can be harnessed to advance a more equitable development. Ruta N is positioned to achieve economic change at scale given the sound infrastructure and capacities it has. Their openness to collaboration should encourage students and practitioners at MIT to bring a critical lens to the challenges they are facing and support their transition from rhetoric to actual economic transformation, which is taking them longer than they expected.