BOGOTA DC. OPPORTUNITIES FOR REGIONAL TRANSPORT IN THE CONSOLIDATION OF CAPITAL REGION.

ID 02090

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ABSTRACT

The configuration of regional areas in Colombia's Central Region, recognizes the history of competitiveness and the strong relationships in terms of mobility, employment and population exchange are reflected there. Bogota, Cundinamarca, Boyaca, Meta and Tolima, which represent 60% of the National GDP, have signed an agreement in 2004, in which they are looking to consolidate as the Central Region. Similarly, on a closer scale to a metropolitan area heavily consolidated, but without formal institutions, Bogota and Cundinamarca Department, representing the municipalities of the metropolitan area, endorsed in December of 2008 the agreement signed in 2001, that seeks to institutionalize the Capital Region, formerly the City-Region. This institutional framework is strengthened by the ratification of the agreement, that has within its strategic projects in Bogota's Development Plan 2008-2012, to operate a regional coordinating body for planning, management and the operation of projects in the Region Capital, to run eight projects managed by local authorities for the Capital Region Development and finally, to put in operation the macro-regional urban project in the area of influence of the Eldorado airport. The consolidation of this package of projects, as well as the dynamics existing in these areas, involve some reflections from the constraints, opportunities and events that enable thought to transcend itself and spaces of articulation and realization of transportation and infrastructure projects, managed together, to enhance the area and improve competitiveness for the benefit of the local residents of these areas.

1. BACKGROUND.

Bogota is a Mediterranean city located at 2,600 meters above sea level and a distance of 850 km of the Atlantic Coast and 360 km of Pacific Coast in South America. It has generated over the last ten years, major changes in terms of its competitiveness and transportation infrastructure that supports their economic activities.

This has meant in terms of regional space that surrounds urban opportunities, that they have led their own economic dynamics and mobility, which are constructed from more privileged central government initiatives, than for the departmental government.

This situation is mediated by the role that since the 1991 Constitution fixed Bogota to the figure of the Department, which is like the figure of the municipality with an apparent autonomy, but limited by the fiscal situation. This is how the central state, transferred resources for investment in municipalities and governorates, who are already earmarking. With this figure, the percentage allocation of resources and the investment that municipalities and governorships can make is limited.

This scenario does not seem conducive to investment in infrastructure by the departments and municipalities, is instead accompanied by a strong state investment in transportation infrastructure that looks forward to equipping the central region of a major road networks and cumulative dual carriageways as described later.

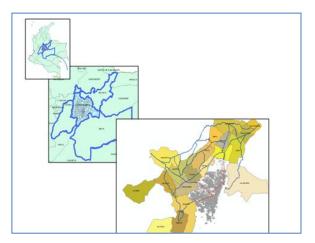
At a meso scale, despite the absence of institutions that have not been able to consolidate, despite various attempts to concretize, Bogota and neighboring municipalities (17 for some authors and others 19) behave as a metropolitan area and have a symbiotic relationship in terms of mobility and flows of people, goods and services that seek to deconstruct in the following paragraphs.

This deconstruction is based on identifying for each of these places: Bogota, the Capital Region and Central Region, the different opportunities that there are translated from the ideas of sustainable mobility and the association of each demographic dynamics that, at least, realize the advantages and disadvantages to each agglomeration unleash the economic activities that cause these human clusters.

2. THE CENTRAL REGION.

This regional meso-scale space, which is illustrated in Figure 1, arises from an agreement of wills promoted since 2004 by the governors of the departments of Cundinamarca, Tolima, Meta, Boyacá and the mayors of Bogota, Ibague, Villavicencio and Tunja, cities capitals of these departments.

Figure 1. The Macro-scale, Meso-scale and Metropolitan scale in National Territory.



Source: Developed by GIS-based SDP.

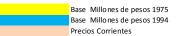
Of all the leaders with political agendas of different streams, trends of thought and sometimes divergent development, achieve common ground in the formulation of a space for thinking and regional foresight, the logic must be understood as historical. These departments and cities located in the central region have been consolidating an important participation in the economic dynamics of Colombia and their symbiotic relationship, based on the provision of raw materials, utilities, food and jobs, consolidating a very strong base relations that allow envision with optimism the realization of this effort, as illustrated below.

2. PARTICIPATION IN THE NATIONAL GDP.

Bogotá is by tradition and after being separated from her three younger sisters cities, Medellin, Barranquilla and Cali, the city with the largest population and which contributes in relative terms the highest percentage of GDP at the national aggregate. The national accounts from 1980 reported a significant share of these four departments in the national GDP, as illustrated in <u>Table 1</u>.

| DEPARTAMENTOS | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2006 |
|--------------------|---------|---------|---------|------------|-------------|-------------|-------------|
| ANTIOQUIA | 81.592 | 85.287 | 109.232 | 10.730.831 | 27.846.337 | 48.236.111 | 55.167.723 |
| ATLANTICO | 24.686 | 24.576 | 30.017 | 3.214.650 | 8.235.356 | 13.881.275 | 15.589.007 |
| BOGOTA | 108.796 | 114.682 | 154.221 | 16.807.311 | 49.374.558 | 84.191.203 | 95.175.836 |
| BOLIVAR | 18.252 | 17.309 | 22.231 | 2.418.700 | 6.521.913 | 12.612.500 | 14.096.676 |
| BOYACA | 17.645 | 18.354 | 21.298 | 1.928.814 | 5.349.542 | 8.914.565 | 10.149.756 |
| CALDAS | 11.709 | 11.840 | 16.186 | 1.650.493 | 3.527.376 | 5.888.973 | 6.765.790 |
| CAQUETA | 3.032 | 2.903 | 4.309 | 472.725 | 929.844 | 1.498.645 | 1.707.097 |
| CAUCA | 9.553 | 9.225 | 13.571 | 992.916 | 2.944.033 | 5.518.138 | 6.199.096 |
| CESAR | 9.003 | 9.522 | 11.251 | 1.136.827 | 2.632.899 | 6.112.081 | 6.972.688 |
| CORDOBA | 10.753 | 10.809 | 15.682 | 1.396.558 | 4.054.840 | 7.141.445 | 8.538.429 |
| CUNDINAMARCA | 31.048 | 30.798 | 49.739 | 3.518.493 | 10.160.432 | 17.954.548 | 20.011.817 |
| СНОСО | 2.205 | 2.210 | 4.013 | 300.577 | 672.858 | 1.165.830 | 1.363.247 |
| HUILA | 9.619 | 9.537 | 14.299 | 1.272.916 | 3.487.970 | 5.880.302 | 6.871.676 |
| LA GUAJIRA | 3.424 | 4.425 | 13.358 | 715.974 | 1.563.592 | 4.105.134 | 4.594.367 |
| MAGDALENA | 9.246 | 9.415 | 12.027 | 1.203.019 | 2.620.507 | 4.567.893 | 5.176.862 |
| META | 8.106 | 8.490 | 13.311 | 1.327.808 | 3.926.777 | 6.301.244 | 7.381.129 |
| NARIÑO | 9.706 | 9.648 | 12.608 | 1.181.667 | 3.040.372 | 5.696.378 | 6.677.932 |
| NORTE DE SANTANDER | 11.410 | 11.409 | 14.392 | 1.272.826 | 3361008 | 5.154.811 | 6.046.358 |
| QUINDIO | 11.600 | 9.269 | 11.023 | 794.654 | 1.788.451 | 2.643.951 | 3.126.101 |
| RISARALDA | 11.438 | 11.290 | 18.496 | 1.329.366 | 3.171.917 | 5.899.769 | 6.714.758 |
| SANTANDER | 27.250 | 28.677 | 40.297 | 3.626.775 | 11.466.592 | 21.867.696 | 25.097.103 |
| SUCRE | 5.160 | 5.281 | 6.307 | 606.517 | 1.565.303 | 2.486.554 | 2.850.035 |
| TOLIMA | 17.935 | 19.255 | 22.795 | 1.927.947 | 4.737.932 | 7.108.341 | 8.221.903 |
| VALLE DEL CAUCA | 64.315 | 64.282 | 83.701 | 8.639.996 | 22.136.895 | 34.866.286 | 40.091.884 |
| | | | | | | | |
| NVOS DEPTOS | 8.282 | 9.293 | 20.895 | 2.577.857 | 11.256.547 | 15.853.266 | 18.230.952 |
| TOTAL | 525.765 | 537.786 | 735.259 | 71.046.217 | 196.373.851 | 335.546.939 | 382.818.222 |
| IUTAL | 525.705 | 337.780 | 155.259 | /1.040.21/ | 190.373.831 | 555.540.939 | 302.010.222 |

Table 1. GDP per Department. Five-Year Participation. Colombia 1980-2006



Source: Prepared based on DANE and DNP.

In 1980, the central region accounted 35% of national GDP. For that same year, Bogota contributed 21%. The decade following reports a percentage increase of 1% in the two figures and the figures for 2006 place the 37% for the Capital Region and 25% for Bogota. This conclusion can be seen in <u>Table 2</u>, which also illustrated how

Bogota has won in the last 25 years, four percentage points of share of GDP, reflecting a high urban primacy in comparison to other capital cities of the country. This situation clearly favors a large metropolitan area that benefits from the fiscal standpoint, economic and investment attraction.

| DEPARTAMENTOS | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2006 |
|----------------|---------|---------|---------|------------|------------|-------------|-------------|
| Region Central | 74.734 | 76.897 | 107.143 | 8.703.062 | 24.174.683 | 40.278.698 | 45.764.605 |
| Bogota | 108.796 | 114.682 | 154.221 | 16.807.311 | 49.374.558 | 84.191.203 | 95.175.836 |
| Total | 183.530 | 191.579 | 261.364 | 25.510.373 | 73.549.241 | 124.469.901 | 140.940.441 |
| Porcentuales | 34,91% | 35,62% | 35,55% | 35,91% | 37,45% | 37,09% | 36,82% |
| Bogota | 20,69% | 21,32% | 20,98% | 23,66% | 25,14% | 25,09% | 24,86% |

Table 2: Percentage Share Bogota - Central Region in the National GDP.

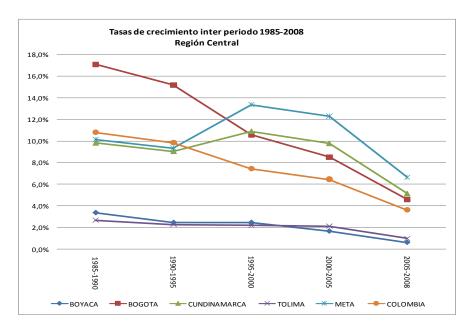
Source: Prepared based on DANE and DNP

The above figures support the conclusion that the Capital Region responds in percentage terms of the third part of the national GDP.

4. POPULATION TRENDS.

In terms of population and according to the growth figures of the past twenty years, it can be build a detailed chronology that reflects the demographic dynamics of population behavior and exposes the declining trend in this regional space and the dynamics of population, than among the four departments that conforms the Central Region and the capital city, have spread, as illustrated in Figure 2.





Source: Prepared based on DANE statistics.

The evidence shows that in terms of attracting population, Bogota has the largest rate Intercessional between 1985 and 1995 (between 10 and 18%). Cundinamarca

12th WCTR, July 11-15, 2010 - Lisbon, Portugal

and Tolima, have the highest values of growth (above 10%). On the other hand, is very marked the difference between the municipalities of Boyacá and Meta, which only grow at rates Intercessional by about 2.5 to 2.8%.

This information gives an account of a phenomenon of migration from the departments of Tolima and Boyacá which slows its growth rate and can give an explanation in Bogota's situation. Likewise, despite the reduction in absolute terms, there is clearly a significant growth in the Capital Region, comprised of Bogota, the municipalities of the metropolitan ring and the Department of Cundinamarca.

Despite these phenomena of inter departmental shift is clear in percentage terms, as reflected in <u>Table 4</u>, that the number of people in this Regional-Meso space increases in the total population, which highlights more hegemony and major advance in the Central Region process, that it must be further promoted.

| | | | 0 1 | | | |
|---------------------|------------|------------|------------|------------|------------|------------|
| | 1005 | 4000 | 1005 | | 0005 | |
| DEPARTAMENTO/CIUDAD | 1985 | 1990 | 1995 | 2000 | 2005 | 2008 |
| BOYACA | 1.137.610 | 1.175.999 | 1.204.934 | 1.234.691 | 1.255.311 | 1.263.281 |
| BOGOTA | 4.225.649 | 4.947.890 | 5.699.655 | 6.302.881 | 6.840.116 | 7.155.052 |
| CUNDINAMARCA | 1.563.498 | 1.717.131 | 1.872.627 | 2.076.798 | 2.280.037 | 2.397.511 |
| TOLIMA | 1.245.631 | 1.278.917 | 1.308.153 | 1.336.870 | 1.365.342 | 1.378.937 |
| META | 510.636 | 562.491 | 615.103 | 697.344 | 783.168 | 835.461 |
| COLOMBIA | 30.794.425 | 34.124.535 | 37.489.666 | 40.282.217 | 42.888.592 | 44.450.260 |
| % Región Central. | 28,20% | 28,37% | 28,54% | 28,92% | 29,20% | 29,31% |

Table 4. Capital Region Population

Source: Prepared based on DANE statistics.

The experience in this scale, as well as the highest ratio in terms of mobility and economic activities between Bogota, the municipalities in the neighboring area and Cundinamarca Department was also harnessed to advance in a metropolitan area, which was first set from the Academy. *"the municipalities that make up the functional metropolitan area of Bogota (a territory without legal foundation that was defined by DUREAU, FLOREZ and others, as demographic criteria geographic, and functional) faces today a challenge to absorb the accelerated growth urban as a proportional challenge that has Bogota in the 60^{1"} This process will be develop in the next lines, seeking to close the meso and micro view that Bogota and its regional space has built from the Institutions, Academia and the private sector, which also promotes this initiative.*

5. METROPOLITAN SCALE. CAPITAL REGION.

The city modifies its employment patterns depending on the type of transportation used. The cities have extensive and diffuse pattern in which the dominance of the suburbs motivates the need for private transportation, and therefore a high reliance on the automobile (New York, Los Angeles). At the other end compact cities are presented with a strong vocation for transit, private transportation trips minors and non-motorized transportation pre eminence as Munich, Vienna and Paris. In an

¹ Goueset Vincent, Cuervo Luis Mauricio et alll. Hacer Metropoli. LA región Urbana de Bogota de cara al siglo XXI. Universidad Externado de Colombia. 2005.

intermediate state can put those cities that have a mixture of these two trends, which are located in some Latin American cities, which must take to qualify urban projects and improve their territory occupancy densities. Bogota falls into the latter group, however since their relationship with the municipalities and the apparent land deficit (which is usually an argument for the benefit of stockholders, Earth), can be considered a relatively compact city with 219 inhabitants / ha, if we assume to have 32,608 Ha for Bogota in which are recorded 7,155,000 inhabitants in 2007. In terms of compactness, there are areas of the city in which these figures are quite different than the geographical analysis conducted with data from the 2005 census.

| Table 5. A | verage Dens | sity in Bogota's Localities | | | | | |
|----------------|--------------|-----------------------------|--------------|--|--|--|--|
| Localidad | Area Ocupada | Poblacion Total2 | Personas/Ha. | | | | |
| Usaquen | 3060,1 | 414950 | 136 | | | | |
| Chapinero | 1114,7 | 126019 | 113 | | | | |
| Santa Fe | 608,8 | 103230 | 170 | | | | |
| San Cristobal | 1362,2 | 409585 | 301 | | | | |
| Usme | 1413,1 | 299594 | 212 | | | | |
| Tunjuelito | 737,6 | 202343 | 274 | | | | |
| Bosa | 1514,5 | 495283 | 327 | | | | |
| Kennedy | 3085,9 | 944778 | 306 | | | | |
| Fontibon | 2680 | 297934 | 111 | | | | |
| Engativa | 2918,9 | 793945 | 272 | | | | |
| Suba | 4747 | 918476 | 193 | | | | |
| Barrios Unidos | 1002,4 | 224217 | 224 | | | | |
| Teusaquillo | 1217,2 | 138992 | 114 | | | | |
| Los Martires | 633,2 | 95867 | 151 | | | | |
| Antonio Nariño | 466,9 | 106649 | 228 | | | | |
| Puente Aranda | 1683,3 | 257091 | 153 | | | | |
| Candelaria | 203,8 | 23985 | 118 | | | | |
| Rafael Uribe | 1278,2 | 376711 | 295 | | | | |
| Ciudad Bolivar | 2325,2 | 567861 | 244 | | | | |
| Totales | 32053 | 6797510 | 212 | | | | |

| Table 5. Average Density | in Bogota's Localities |
|--------------------------|------------------------|
|--------------------------|------------------------|

As Adrian Guillermo Aguilar warns "Recent evidence shows that metropolitan expansion is taking a different shape to that of the recent past. While growth rates in large cities in general have slowed in the past two decades, economic concentration persists at a high level, metropolitan expansion and continues to incorporate new municipalities adjacent. In terms of territory, a relatively compact metropolitan area, with the contemporary mega-city expansion it presents as more polycentric, creating a pattern more associated with networks and with less precise boundaries and borders hardly definable. This generates a pattern of expansion with trends of urban sprawl gradually incorporating small towns and rural neighborhoods within a metropolitan system increasingly broad and complex. According to the above, the mega-cities are experiencing new dynamics, and therefore are facing new challenges according to a organizational space within a globalizing world."²

Bogota is facing an urban dichotomy in territorial foresight. On one hand, should support a model of devolution of activities conducive to a better territorial balance,

Source: Prepared based on 2005 Census data and GIS for the District Department of Planning.

² Aguilar Guillermo Adrian. Las mega-ciudades y las periferias expandidas.

Ampliando el concepto en Ciudad de México. EURE. Santiago 2002

which by limiting developable areas must tend to settle in the medium term of the closer municipalities and at the other hand, should consolidate a system of centralities within its urban area with a strong vocation to the service sector, which require significant investments in resource management, improving capacity of the growing infrastructure and implementing services of an efficient transportation system and dignified. These centralities are being consolidated compete on provision of land for housing and commerce, with a periphery which by its terms can offer lower costs of land, from the standpoint of rational economic actors, but that does not value environmental deficit and sustainability, in which they are immersed in the whole territory of inefficiency in the consumption of land. Recent analysis in Bogota had evidenced than in terms of equity, there are problems that had important effects in terms of access to urban services, as shown next figure of densities of Mass Rapid Transit proposed in Bogota.

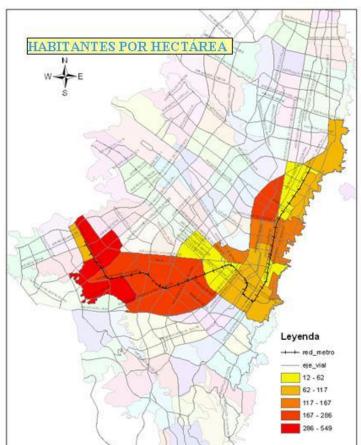


Figure 3. Inhabitants/Ha.

Source: Prepared based on the GIS of the District Planning Secretariat.

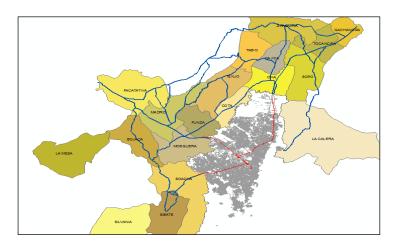
Sorribles and Izquierdo in his book Cities in the XXI Century, located in urban development intervention, under the proposed equilibrium system, to note that "... the sustainability of urban development must be understood as an evolutionary process that encompasses the collective learning of capacity for conflict resolution and strategic design capability. They are considered together the various systems that make up the city (the economic system, social system, the physical system - built

and cultural heritage-and the system environment. This process aims to maximize the area of integration between different subsystems of the city and minimize the negative externalities between them ... "

6. THE REGIONAL TRANSPORTATION IN THE CONSOLIDATION OF THE CAPITAL REGION.

The city of Bogotá has an area of 32,600 ha urbanized road network of 15,327 kmlane, of which 855 km are for the sub-rail transportation, an estimated 7.2 million inhabitants, which generates about 9.0 million trips daily, a network of bicycle routes of 301 miles, a fleet estimated by 1,250,000 vehicles, of which 93% are private transportation. The capital raised in the last decade a different concept to address the growing number of travel features that the city generates, with the inclusion of TransMilenio in their travel options. However, in the regional scale, which is part of its bets, enacted since the land use planning has failed to advance inter-regional transport system, enabling a more visible consolidation of regional space. Figure 4 presents the main highway network that serves the metropolitan area, Bogotá and the municipalities that form it.

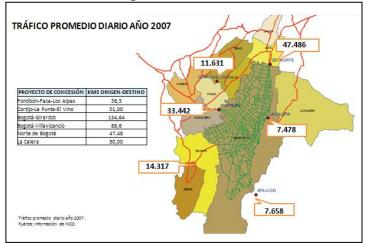
Figure 4. The metropolitan scale.



Source: Prepared based on the GIS of the District Planning Secretariat.

Bogota and the Department, now called Region - Capital, from a new audience of political actors (after four years of neglect in the construction of regional institutions), being still unable to build a regional transportation project that allows efficient use of roads and transportation of equipment in this regional space serving the demands of different users. The traffic volumes of the concession roads surrounding the Capital District are illustrated in Figure 5.

Figure 5. Traffic volumes on the first ring of metropolitan space. TPD (Daily Average Trip in equivalent vehicles).



Source: Prepared based on the GIS of the District Department of Planning and Traffic Volumes INCO.

In recent months, it has being highlighted the fragility of the road system, currently limited in income for the poor infrastructure in Bogota.³

Supply of roads surrounding the District has been promoted from the central government (national government) with the construction of two projects of dual carriageway linking the capital city with other departmental capitals, ports and obviously, with the municipalities of the first ring metropolitan. From the capital, this process is accompanied by the maintenance of private road network and the improving of the internal network for transportation. However, in terms of travel and mobility that exist in this area, there is a systematic process of analysis of traffic and has not been consistently documented the effects that this road has led to supply the metropolitan area as a whole (Bogota and 17 surrounding municipalities).

The absence of consultation processes for the construction of this infrastructure has produced adverse effects on the competitiveness of the metropolitan area. While the dual carriageways are resolved at the periphery of the City and benefit the metropolitan area, the connection of these pathways, except exits east on the Way to Villavicencio, 80th Street and Highway to Soacha, other rods as 13th Street and Highway North, don't have an appropriate response from the Central Government, the Departmental and National.

In demographic terms, recent research has shown a decline in growth rates within the city and a higher growth rate of the municipalities near of Bogota, as shown in Figure 6. This situation highlights a deepening of the center-periphery relations in terms of Bogota and the surrounding municipalities, which is additionally supported in an apparent shortage of developable land in the city, that has moved to a housing market supply projects in neighboring municipalities that increased reliance on goods

³. Collection of new tolls on Highway North faced Minister of Transport and Governor of Cundinamarca. "The work (the extension of the path from the road 190 to the bridge of the Common) can not pay a few citizens of the region," said Gov. Andres Gonzalez. "The cost we have to assume it all," said Gonzalez. In addition, he hinted that the toll road decision was taken without taking into account their views. "Any toll should be concluded and that process has not been supplied," said Gonzalez, who considers it vital that rehabilitation of the road. El Tiempo. 4 de noviembre de 2008.

and services in Bogota, with a significant increase in private modes of travel to and from the capital.

The picture of unsustainable management of these decisions disjointed, is exacerbated by the inclusion of the Commuter Rail project, that notwithstanding the significant benefits that may have to consolidate the regional model deepens the dependency of municipalities to Bogota in terms of dormitory towns, not accompanied by concrete actions in nearby municipalities to promote the consolidation of multifunctional centralities with mixed uses, which really support the economies of the municipalities will benefit from the project.

Figure 6. Growth rates Bogota Municipalities of the first ring. 1985-2005

| | Tasa anual de creci 1993-2005 | |
|---|----------------------------------|------|
| | Bogotá | 1.9 |
| | BOJACA | 4.33 |
| | CAJICA | 2.4 |
| Carchaneiga | CHIA | 5.2 |
| All a | COTA | 3.69 |
| Tocarages | FACATATIVA | 3.00 |
| S 6 . 194 | FUNZA | 2.92 |
| | GACHANCIPA | 4.8 |
| 7 | LA CALERA | 1.3 |
| | MADRID | 2.90 |
| 1138 | MOSQUERA | 8.0 |
| | SIBATE | 2.12 |
| | SOACHA | 3.80 |
| | SOPO | 4.4 |
| N. O.V. | TABIO | 5.54 |
| The second se | TENJO | 0.8 |
| Convenciones Tasa de Crecimiento | TOCANCIPA | 5.3 |
| 0.87 - 1.37 | ZIPAQUIRA | 2.4 |
| 248-3.80 3.87-5.54 5.55-8.07 | 17 Mpios | 3.6 |
| 2.20 - 8.47 | CIUDAD REGION | 2.1 |

Source: Information and Mapping Branch. District Planning Secretariat.

While in the period 1993-2005, the municipalities of the city region are growing at rates of 2.17%, the growth rates of vehicular movement in the last four years 2004-2007, observed in one of the toll income the city, reflects inter-annual rates of around 2.67% for private vehicles, as shown in <u>Table 5</u>. This situation puts the growth of travel in private vehicles in the Region - Capital in excess of the rates of population growth in the same space.

| Table 5. | Fleet | growth. | Toll Los Andes. | 2004-2007 |
|----------|-------|---------|-----------------|-----------|
|----------|-------|---------|-----------------|-----------|

| | | | | | 0 | | | | | | | | |
|-----------------------|---------------|---------|--------|--------|------------|---------|-----------|--------|------------|---------|-----------|-----------|---------|
| | Estación: And | 88 | | | | | | | | | | | |
| Categoría I (Autos | Enero | Febrero | Marzo | Abril | Мауо | Junio | Julio | Agosto | Septiembre | Octubre | Noviembre | Diciembre | Total |
| 2004 | 453522 | 440382 | 472853 | 448221 | 480488 | 464513 | 482116 | 485744 | 459607 | 490028 | 475986 | 546415 | 5699875 |
| 2005 | 458433 | 426075 | 477814 | 469118 | 498238 | 481962 | 514580 | 504650 | 480384 | 487053 | 470138 | 548489 | 5816934 |
| 2006 | 460926 | 436415 | 470818 | 465668 | 455421 | 448425 | 478560 | 493449 | 487677 | 490670 | 487595 | 579902 | 5755526 |
| 2007 | 491178 | 459404 | 515612 | 490767 | 520593 | 529237 | 534458 | 555851 | 539969 | 526371 | 544126 | 625870 | 6333436 |
| | 2% | 1% | 2% | 2% | 2% | 3% | 3% | 3% | 4% | 2% | 3% | 3% | 3% |
| | | | | Source | ce: Gaugii | Ministr | y of Tran | sport. | | | | | |

On this point it is important to consider further that in terms of fleet growth in Bogota, enters the city each year more than 140,000 new vehicles, which shows that the distribution of travel continues to be concentrated in large volume in Bogota. This is

determined by the current distribution of the population that 1.1 million for municipalities in the first ring and 7.2 million for Bogota.

The consolidation of the city region that the Land Management Plan for Bogota is promoting, must to consider the flow of passenger and cargo geographical space and the interrelationship that exists in the physical level must also be given in the Framework both public and private institutions, which involves an exercise of knowledge of the relationships at the District level, department and municipalities in the Sabana and the dynamics and inertia that inter-agency processes can make to development and implementation of this regional area, however, the intention rulers have raised so far in terms of population distribution, that it begins to take his first sketches to further growth of the towns near Bogota, but due to limitations in terms of transportation supply has not yet the dynamics that can generate significant economic processes in regional terms.

The Urban dynamics, which have prevailed in megacities (cities with more than ten million people and scattered development patterns and land uses), within which are found in Bogota 6 years, must amend the mobility patterns, directing the move towards less dependence on private means to meet the travel needs and desires. In this framework, population growth on a city wide, relatively compact, press demands for higher ground, and dependence on the motor vehicle is maintained. However, this situation had the periphery (municipalities of the first ring) still reflects promising opportunities to be covered with an excellent transit provision, in which ferrous modes can be an excellent opportunity, plan effectively articulated and prioritized.

7. A HOPEFUL FUTURE.

Interventions in infrastructure oriented to meet travel demand through greater investment in roads, can't do not grow at the same rate of population growth, or to the rate of motorization, which is usually larger, as evidenced in Figure 7. This, without the maintenance deficit, which further delayed daily interventions in the highway network built.

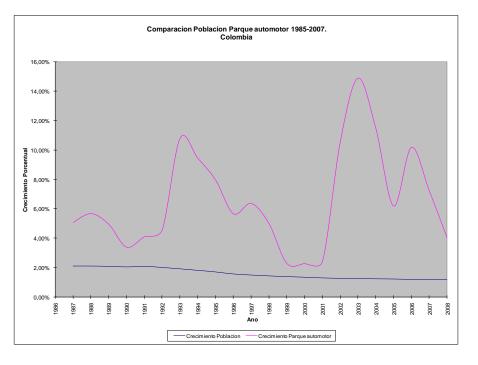


Figure 7. Annual growth rates and population Automotive Park. 1985-2008

Source: Prepared by author based on Ministry of Transportation and DANE.

The model evidence a structural weaknesses that was noted by the most advanced cities in their development, showing that Bogota, has a sustainable option, which creates a pattern of optimized use of infrastructure and existing facilities to meet the travel (supply), the "intervention" in travel demand and the "management" of transport flows Mobility System, generating a decrease in infrastructure costs and significant savings in terms of generalized travel cost, pollution and accidents. That's the bet that the Administration is promoting in Bogota, with projects like the Integrated Transit, subway and commuter train on which Bogotá and the Region are working together.

On the first entry is expected to be in operation during the second half of 2010, gradually, looking for a concerted migration transporters highly fragmented model in the operation of the service, to a scheme of operators, under similar schemes to the concession operation of mass transit corridors, and under management, programming and control of TransMilenio SA as operator.

In the regional space progress was made in 2008 at the conclusion of the Regional Mobility Agenda, the definition of a list of strategic projects that are expected to prioritize in 2009 through the Master Plan of Regional Mobility, based on guidelines that formulated in 2008, will advance the construction of a Single Regional Transportation Authority.

As for mass transportation projects, advancing beyond the level Structuring Feasibility of Commuter Rail will be the Consultant of the metro network, currently

under way, the defining moment for Bogota and the amount of ferrous investment projects

For the city is clear, that despite the spatial segregation that exists even at the edges conurbations, with a predominantly North turned to serve upper strata (Chia, La Calera and Cota), a South oriented with Soacha to lower strata and Sibate, a West divided between a strong industrial area marked by the presence of the Airport (Funza, Madrid, Mosquera) and middle-income strata and eastern zone, which shows no strong tensions in terms of conurbation, it is only through the definition strategic interventions in terms of infrastructure for cargo transportation, private transportation and mass transit that may properly manage relations with its neighbors in the metropolitan area. This tree of options, including stem for TransMilenio corridors, hallways concessions for roads with a high component of private transportation and loading and exercise applied public finance to invest with the best indicator for passenger mobilized the resources available for projects mass transit.

In this effort stand out better relations in terms of institutions, a marked interest of Cundinamarca and the municipalities of the region to improve the understanding of mobility issues, challenges and possibilities and full conviction, that only through proper consultations on the edges, as well as agreements on fiscal issues and territorial occupation, it is possible to manage a regional territory, competitive and sustainable than the first seat Colombian megalopolis will be consolidated by 2015.

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