THE INNER ORGANIZATION OF ARTISANAL PUBLIC TRANSPORT OPERATORS IN GOIANIA, BRAZIL.

Renato Guimarães Ribeiro Rômulo Dante Orrico Filho Karla Fabiana C. França Barboza Enilson Medeiros dos Santos Federal University of Rio de Janeiro COPPE / Transport Engineering Program

1. INTRODUCTION

In order to analyze the operational model adopted by the artisanal transport operators of the Metropolitan Region of Goiania, the division in two different periods is required. The first one goes from service operation start-up in August 1999 to the issuance of precarious authorizations by the government in September 2000. During this time, the Union of Artisanal Transporters (SINTRAGO) was the regulating authority. The second period begins with the issuance of precarious authorizations, in January 2001, and ends with the beginning of the collective transport-restructuring project of the Metropolitan Region of Goiania in December 2001, with the public regulatory agency and administrator during that period being AGR – Goiania Agency for Regulation, Control and Inspection of Public Services.

A survey was carried out for such an analysis and the standards and rules that governed the urban collective transport of the Metropolitan Region of Goiania from 1999 to 2003 were also gathered, highlighting those that had a direct impact on the operation and production. Among these documents are the Deliberations issued by the Granting Authorities, CDTC – Deliberative Chamber of Collective Urban Transport of the Metropolitan Region of Goiania, the rules and standards implemented by SINTRAGO, the Cooperatives and the lines. The following items were defined as parameters for study analyses:

- Participation and social control in administration;
- Inspection and quality assurance for the provided service;
- Planning of the operation and the parameters for service mobility;
- Criteria for issuing the precarious and provisional authorizations;
- Competition between the conventional and artisanal modes.

1.1. Main aspects of collective transport service operation

As a constitutional provision in Brazil, the public collective passenger road transport is understood as a public service, demanding, therefore, explicit approval from the appropriate federal entity. The internal services of a city are under the autonomy of the local municipality, while those linking two municipalities pertaining to the same state are under state jurisdiction and those crossing the borders between two states are under the Union's administration. Officially, services provided without approval are not recognized, although since the second half of the nineties, the rise and expansion of these services in a large number of Brazilian towns of all sizes have been possible. In those cities, the regulation is usually carried out based on old contracts, with very long duration, not submitted to the previous bidding process. Such contracts, associated to regulations that inhibit not only market competition but also the competition for the market, in practice, remain *ad infinitum* and create severe barriers to the entry of new operators.

Price formation based on the average cost and the guarantee of economical and financial balance for the enterprise, for its part, leads to inefficiency which, in time, results in the relative increase in tariffs and ends up turning away users as well as in attracting operators even outside the legal sphere.

Oliveira (1989) defines regulation as being one of the tools used by the administrator to intervene in the market economy. It is a case of activity normalization, in other words, a set of rules set forth and applied by the administrator to the sector and which should govern the behavior of the productive agent and its inter-relations with the environment, as well as the main characteristics of the service. This tool, edited by the administrator should allow him/her to control some or all of these aspects:

- Activity management;
- Systematization of its nature, development and marketing conditions;
- Standardization of the service's main characteristics;
- Definition of relationship forms between its executives, the consumers and the agency responsible for applying the regulations.

For VISCUSI *et al.* (1995), although economical regulations may comprise many variables like for example, product quality, performance and investment made, three variables are highlighted: those referring to control, orders and restrictions on the company's decisions on price, quantity, and market entry and exit. These ideas were complemented by SANTOS (2000). He considers the following among the regulation measures:

- Market entry and exit controls;
- Controls of quality and quantity of production;
- Fixing or controlling prices, rates, and profitability.

According to BARBOZA (2002), when the State establishes rules for the artisanal transport sector, these must be for economic development and adjustment of the market's imbalances, intended to obtaining maximum efficiency in provision of services and ensuring the social well-being. This way, the users would be provided a more efficient and effective service and the operators would guarantee their economical and financial balance.

2. ARTISANAL TRANSPORT IN THE METROPOLITAN REGION OF GOIANIA

At the national level, a combination of factors can be pointed out to explain the reason why, in such a short time, the artisanal transport service managed to invade the passenger transport system. The Brazilian recessionary crisis in the

beginning of the nineties brought about a non-negligible movement towards informal labor relations in all markets. In the transport sector, besides the loss of quality in the regular service, the facilities created for importing vehicles were another significant factor. Reinforced by the strong Brazilian currency visà-vis the U.S. dollar, the market opening made vans, especially those manufactured in South East Asia, an affordable asset. The high unemployment rates and the move to dismantle the State, which led former civil servants to the informal economy, took care of the rest. With their compensation checks, they were the first to invest in the attractive market of clandestine transport that seemed to be a promising revenue source that had all the conditions, they believed, to be inexhaustible (RIBEIRO, 2004).

Thus, new collective transport services operated by these low capacity vehicles and in full informal conditions emerged in the large Brazilian urban centers. Operated initially as chartered trips to meet specific demands, they began to identify market niches in regular service (BALASSIANO and BRAGA, 2000). The bad quality of regular service, especially its low supply in rush hours, led these self-employed operators to compete in some routes. Higher vehicle supply, smaller and more comfortable vehicles and with similar price motivated the users to shift to this new transport mode, bringing about the so-called artisanal transport.

The changes that occurred in the urban collective transport system of the Metropolitan Region of Goiania in the nineties, were not sufficient to meet the wishes of users, resulting in a crisis in the system at the end of the decade. In the same period, the Brazilian economy suffered one of its major crises, which shook the Brazilian economical structure and the employment market. The conditions were perfect and the informality existing in other sectors of the economy appeared in the urban collective transport in the end of 1999. Alternative transport, operated by self-employed drivers who claimed the right to work for sustaining the family, was a reality on city roads (RIBEIRO, 2004).

2.1. First Operation Period: August 1999 to September 2000

Since the commencement of operations, the operators were organized in one entity, SINTRAGO. CROSS (2001) says that this form of a union organization is a characteristic of the informal sector where the employer is not well defined, territoriality is high and threats are well defined, factors that lead to an easier organization than in other segments.

The role performed by this entity had strong similarities with the role of public administration bodies. It consisted in a guarantee concerning the compliance with the social role of the system, in encouraging and controlling people participation, in optimizing and rationalizing the service, implementing operational rules, regulations and standards, and in inspecting the system.

Approximately 150 Kombi type vehicles and vans operated in the first months, linking routes overlapping the conventional system's main lines, which had

then about 1,100 vehicles transporting 20 million passengers per month. Without undergoing profound structural changes, the conventional system, which is trunk fed, became weak in the face of this new mode of transport that operated without integration and transfer in the scrap Integration Terminals, where users wasted a lot of time and had little comfort.

Soon after commencing operations, SINTRAGO structured planning and control mechanisms and instruments that could ensure a control of the service rendered by its associates and to regulate the entry of new vehicles in the market. This planning and control structure was supported by three departments: Technical, Operational and Inspection. Although there were other organizations representing artisanal transport, none had the size of SINTRAGO and they had similar management models.

In the beginning of 2000, the Technical Department had three engineers with post-graduation in transport and four transport technicians, responsible for planning the operation of the service to be provided. Their powers were a mix of public administrator and private operator responsibilities: (i) feasibility study for new lines; (ii) dimensioning the new and current lines; (iii) implementing the time-table; (iv) defining quality parameters for vehicles in operation; (v) help prepare system regulations; (vi) implementing cost control tools, etc. Among the functions performed by this sector the following must be highlighted: (i) creation of lines with radial and circular routes without overlapping the conventional system; (ii) study of new vehicular technologies with the option of using minibuses with 23 seats to replace the vans; (iii) preparation of inspection regulations; (iv) creation of a daily control booklet for vehicle costs and receipts; (v) conduction of statistical schedule studies for defining the time-table of lines.

The Operational Department's activity was focused on control of the service operation, an essentially business activity developed only by the cooperative associates, without contracted technicians. The operational model was based on those set out by local companies. The lines had a control point in each neighborhood fully structured in rented offices, where an operator subordinated to the Cooperative was allocated the task of recording in a proper form the time, number of trips and passengers in the vehicles. The lines were divided in Groups and a Director was made responsible for each Group. The innovation in this operational model consisted of a more intense participation of operators in the administration. The model inspired in the one existing in Porto Alegre designated one leader per line. These line leaders, referred to as Line Deputy, were usually elected by the representatives, were self-employed operators and had as responsibility the administrative and operational control of the line and representation of cooperative associates in the representative entities. The leaders met with the Union ordinarily once a week to discuss existing problems.

RIBEIRO (2004) carried out a survey in 2002 (error margin of 6.5% and confidence interval of 95%), which numerically describes these coordination aspects of the Operational Department. Table 1 shows that of the 74 existing lines more than 80% had a Line Deputy and most of the time (82%) they were elected by the grantees themselves (Table 2).

Table 1			Table 2			
Line Leader	Total	%	Position Takeover	Total	%	
Yes	59	80.4%	Elected	49	82.2%	
No	15	19.6%	Cooperative Indication	11	17.8%	
Total	74	100%	Total	59	100%	

The majority (96%) of Line Deputies was considered by the other line grantees as active (Table 3). This fact led to a larger participation in the system administration and indicates that there are constituted and active elements that can contribute to an ongoing search for service improvement. The main functions related to Line Deputies are described in Table 4, where inspection and organizing are highlighted as key functions.

Table 3		Table 4			
Leader is active	Total	%	Leader functions	Total	%
Yes	57	95.6%	Inspection	29	28.
No	3	4.4%	Organization	28	27.3%
	, i i i i i i i i i i i i i i i i i i i		Coordination	15	14.3%
Total	59	100%	Resolving conflicts	15	14.3%
			Representation	9	9.1%
			Regulation	7	6.5%

According to Table 5, most of the lines (93%) carried out Periodic Meetings. In accordance with Table 6, these were coordinated by the Deputy in most of the lines (55%), by the cooperative in 38% of the lines and by the indicator in other cases (7%). In the lines where there was no Line Deputy, the Meeting was coordinated by the cooperative. Besides these periodic meetings, meetings were carried out with the cooperatives in 75% of the lines (Table 7).

Table 5					
Periodic Meetings	Total	%			
Yes	69	92.9%			
No	5	7.1%			
Total	74	100%			
Table	7				
Meeting w/ coop	Total	%			
Yes	56	75.0%			
No	19	25.0%			
Total	74	100%			

Table 6				
Meeting coordinator	Total			
Indicator	5	6.5%		
Cooperative	29	38.4%		
Deputy	42	55.2%		

Tables 1 through 7 demonstrate the existence of a high degree of worker participation in production management. Empirical studies quoted by FAVERET in the debate in GRZYBONSKI *et al* (1998) demonstrate that democratization of capital is enhanced when a participative production management exists, causing significant increase in performance indicators in the positive sense.

All individuals, even those belonging to an organization or group, have purely individual interests that differ from the interest of others. Thus, although all group members aim at achieving collective benefits, each one is ready to pay a different price for the provision of this collective benefit. There is thus a difference between the forces that impel individual actions and collective actions, especially when the interest of the community is at stake in instances and forums pertaining to the public sphere, before the public welfare. It is possible to say that this differentiation is due to the calculation of participation costs or those of the non-participation and distribution of the public welfare and wrongdoing OLSON (1999).

OLSON's principle can be empirically noticed in the vehicle distribution model of self-employed operators in the lines, who had a strong tendency towards internal corporatism and concentration of vehicles pertaining to the leaders and people close to them in the lines with higher demand. The survey carried out by RIBEIRO (2004) also confirms this principle, as can be seen in Table 8.

Table 8		
Inadequate behavior assessment	True	False
Excess of Speed	93%	7%
Non-qualified persons working	93%	7%
Aggressive driving and running over	89%	11%
Transporting standing people	88%	12%
Refusal to transport elderly people and students	83%	17%
Unfair competition among alternative means	78%	22%
Traffic worsening in downtown	37%	63%

The third existing structure is the Inspection Department, which is responsible for verifying and ensuring the efficiency and effectiveness of parameters defined for the system. This attribution is essentially public in nature. We can highlight as its duties: (i) inspecting the vehicles that intend to join the system; (ii) removing from circulation, vehicles that do not have the quality parameters established; (iii) inhibiting the uncontrolled expansion of the system; (iv) preventing the employees from taking two work shifts daily; (v) ensuring the transport for users with the right to free transport and half fare etc. This management structure ensured the system a significant quality level of the service provided during the period of clandestine operation.

The users, as against public authorities and operators, welcomed the artisanal transport system with great joy. Not just because it represented a new transport option and a significant improvement in service, but also for its participative management model that respects its workers and let them participate in service planning. As an example for this respect to the community rights is the free transport of people with special needs and elderly people, as well as the levy of half fare for students. It is important to emphasize that in many towns, the artisanal transport did not incorporate the privileges enjoyed by users in the conventional transport system. We must also mention operation planning, which was done jointly with community associations to define itineraries, time-tables and operational fleet.

The partnership projects between the community and the self-employed operators gave rise to two new operations: *Corujão* and *Conduz Ir*, that redeemed the right to use the services offered in the town by a portion of the society. The collective transport night service, *Corujão*, complemented daytime service operation, and the *Conduz Ir* Project made available for users with special needs, a transport service well adjusted to their requirements. The result was the guarantee to night workers, to low-income population and to a large portion of people with special needs, of a service more adapted to their needs.

Trying to solve the illegal status of the service that was being provided by the self-employed operators, the public authorities established a police control as the first policy to be adopted, implemented by means of applying fines to the owners, apprehending vehicles and repressing with violent actions those who were irregularly exploring this type of passenger transport. Five repression facts stand out, all confirmed by the operators (Table 9):

- In 1999, in the first months of artisanal transport operation, the public authorities threatened to apprehend the vehicles for commercial passenger transport; as a reaction, the operators operated during a certain period without charging for the transport service;
- In the end of 1999, the leaders started a hunger strike to press the Governor for service legalization, in front of *Palácio das Esmeraldas*, the state government's headquarters;

- During the hunger strike period, in a confrontation between the police and pro-alternative-transport demonstrators in the UFG Campus, a service operator died, victim of a rubber bullet from a Military Policeman;
- The government decided to legalize the service after the incident, but authorizing only the microbus type vehicles, which led the operators to two new demonstrations. A siege was made on the Mayor's house with minibuses while the vans operated and finally the Civic Square, the central point for the municipal transport network, was blocked. Both the movements received demonstrations of support from the population.

Table 9			
Position regarding political manifestations (2000)	In Favor	Against	Indifferent
Free transport for one day	92%	1%	7%
Hunger Strike in the Civic Square	88%	4%	8%
Demonstration in Campus with death of José Marcos	84%	3%	12%
Siege of the Mayor's house – Nion Albernaz	82%	6%	13%
Blockage of the civic square with 100 buses	93%	1%	6%

. . .

The government finally surrendered to the demands of the society and the informal operators were granted, in mid 2000, the authorization to operate the service, but without due service regulations, support to entities that could unite these operators, professional qualification, financing sources, etc., depriving them of a pro-active public policy. The public absence was also apparent in the non-regulation of citizenship services – *Corujão* and *Conduz Ir* – weakening their operation.

The process of issuing the precarious and provisional authorization (Deliberations - CDTC 02/2000 and 05/2001) had the strong intermediation of the representative entities related to public authorities and three negative facts marked this period:

- Defining the number of vehicles through a political and non-technical criterion increased their number from 420 to 740 operating vehicles;
- The possibility of transferring the initial registration to another person –Term of Consent;
- Strong accusations that persons who were not really working were receiving authorizations in detriment to those operating.

The questions presented in Table 10 demonstrate the perception of the grantees about these facts.

Authorization distribution assessment	True	False	No opinion
Some received without taking part in the movement	86%	10%	5%
Some sold it	79%	16%	5%
Large utilization of consent term	70%	21%	9%
Lobby in distribution	67%	24%	9%
Some paid for the authorization	62%	30%	8%

Table 10

The public policy directives of the government for the collective transport system were set forth in the *Transporte Cidadão* (Citizen Transport) Program launched in August 2000 by the Government of the State of Goiás. It had among its express goals, to positively intervene in the quality standards of collective transport in the RMG – Metropolitan Region of Goiania (Deliberation - CDTC 001/2000). For this purpose, it proposed amendments in the system's aspects related to planning, control, service inspection and infrastructure.

Chapter 3 of this Deliberation, referred to as *Opening of the Market to Competition*, is based on the principle that the market regulates itself tending towards an improvement in the conditions of price and quality of the service or product offered and proposes a market segmentation by means of opening and stimulating competition. This measure triggered a series of consequences to the collective transport market and in none of them is it possible to observe an improvement in the quality of the service rendered.

Chapters 4 and 5 deal with the improvement in the system infrastructure. Although the measures have never come into effect, they benefited only one of the modes, the conventional one, thus directing the State's action and support towards this system.

In the survey about the main difficulties faced (Table 11), problems due to absence of regulatory mechanisms by the public administration were mentioned by 74% of the grantees. Problems caused by competition appear in the items Low profit (60%), increased competition (57%) and lack of customers (12%). One aspect that appears in the survey of the difficulties is related to obtaining credit (14%). In the national IBGE (The Brazilian Geographical and Statistical Institute) survey in 1999, the lack of customers stands out, with 28% globally and 34% for the transport service sector, followed by strong competition/ problems with inspection at 25% in general and 19% in transport services.

(12 months)	Total	%
Problems with public administration	544	73.6%
Low profit	442	59.8%
Very stiff competition	421	56.9%
Lack of own capital	162	21.8%
Lack of credit	102	13.8%
Lack of customers	85	11.5%
Other difficulties	30	4.0%
Total	740	241%

Table 11 – Difficulties in the last year
Difficulties currently faced

612 said they faced two difficulties and 433 faced three difficulties

The precarious and provisional authorizations were attributed to each operator individually, with informal intervention by the cooperatives, without however, a later regulation contemplating the Trade Union or the Cooperatives related to this and its function in the artisanal transport system, and the relationship of these with the Government is entirely informal. Thus, the absence of public regulatory mechanisms and the fragmentation due to the absence of a regulation stimulating the constitution of an organizational structure by line or by group of operators resulted in the representative entities not being able to provide a suitable service to the grantees.

Strictly speaking, 740 new companies and business cultures came into existence, dividing themselves into leasing and financing, those that changed the line of business, those that lost the working capital, those that cannot suffer losses and need to bear the expenses and have little knowledge of the market in which they operate. This entrepreneur started to compete not only in the market, but within the line itself, causing each one to act individually in the operation of the system and to compete among themselves for a place in this market.

A few groups of artisanal transporters continued associated with the Unions and Cooperatives and together sought to improve the mechanisms that allowed more efficient controls of services and guarantee a minimum quality level; however, there were independent operators too within the same line.

In the survey, the general organization of the line was shown in two distinct modes: the first questions if it tried to organize the operation and the second, if this operation is organized. In the grantees' perception, in 93% of the lines there were attempts to organize the operation, but were successful in only 67% of the lines (Table 12). Non-participation of everyone in the process of organizing the operation becomes evident while checking the implementation of

the norms. The existence of the norms is mentioned by 91% of the grantees but 67% admit that not all comply with them.

Assessment of the operation of the line	Yes	No
Operation is organized	67%	33%
Organization of operation was attempted	93%	7%
Operating norms exist	91%	9%
Everyone obeys the norm	33%	67%
There is a starting scale	98%	2%
There is an operational worksheet	92%	8%
Operation is from 5AM to 11PM	74%	26%
There is a timekeeper and he is essential	91%	9%
There is a leader elected by the cooperative members	81%	19%
The leader is a performer	71%	29%
Grantees meet periodically	78%	22%
Cooperatives visit the line every week	35%	65%
There are vehicles in excess	42%	58%
There is a compensation chamber	24%	76%

Table 12 – Assessment of the operation of the line

A new mechanism created by a few groups within the most organized grantees was the compensation chamber per line, putting an end to the internal dispute for receipts and passengers. In spite of the beginning, with only 25% of the lines, the implementation of this mechanism made the reordering and organization in other bases possible.

3. CONCLUSIONS

Incorporating the new model of public administration and regulating all the existing problems regarding regulation, management, society's participation, etc. also brings new challenges and behaviors. At that time, what was an alternative, a rejection of the prevailing system by popular choice, became the system and to compete for passengers in lines. In a more concrete manner, the grantees have become apathetic to transporting passengers for free, and only think about making their undertaking economically viable, even without planning and a proper and specific model.

With the weakening of a part of its social projects and with the population beginning to abandon this system, this important social movement fights for survival, sustaining itself only by its theoretical reference, and finds itself and the whole model of popular participation and respect to social rights that it had tried to construct, threatened. It can be observed that the first time the regulatory power was exercised by the organization of autonomous transporters, which guaranteed the economic and financial balance of the system under the private vision and not of a public service. But, it also guaranteed the user community, participation in the management and incorporated in the system of collective transport new services, which possessed a strong social bearing, such as, night service and transport of the people with special needs in addition to consolidating the gratuities and discounts in the transport of elderly people and students.

The second moment had as its starting point, the dispute for the market between the conventional and artisanal service as a means of improving quality and lowering the tariffs for the users. In practice, the control of service was made solely and exclusively by field inspectors, as there were no indicators to assess the efficacy and efficiency of the service, and there were no mechanisms for user participation in the control of the service. Another salient point was the distribution of the authorization individually, resulting in a real disintegration of the existing cooperatives.

The absence of efficient public and private policies for the new transport market setup in RMG (Metropolitan Region of Goiania) was easily noted by the operators and users, as well as the evident lack of sincerity in several processes, contrary to the principles of solidarity. This leads us to conclude that:

- The perception of the fact that some were privileged in detriment to the others in distribution of authorizations, excluding even people who previously used to operate, points to the predominance of a economic and capitalist imbalance and not of a social movement for inclusion and participation of the excluded in the employment market and to sustain the family;
- The same is also noted when a part of the grantees position themselves contrary to determined regulatory items – make it mandatory for grantees to drive the vehicle, transport standees, vehicle capacity of 23 passengers and the release of the sale of authorization;
- The principles of opening of the market were the factors that contributed to the price war, with the worsening of the transport conflicts and the refusal to transport free travelers and students (half fare);
- The local government's failure in promoting and providing support to the structuring of the sector is not only seen in the absence of a regulation, but also in the non-opening of special credit for the sector, in the lack of technical support and in the low incentive for qualification;
- Stiff competition, as was prevailing in the market, makes it impossible to optimize the system, increase the supply of services and reduce the demand with an immediate impact on the tariffs in the system, as the existing tariff composition model still uses the average cost method;

- Despite the absence of public policies based on the local administration's initiatives, several actions and measures were made by the grantees in an attempt to structure a model that would be appropriate to their reality;
- At this moment, there is service difficult to control, difficult to standardize, difficult to draw up itineraries, as there are 740 small companies working individually and which are unable to comply with the role of producing and organizing the service, standardizing employment, production, vehicle, tire, training, etc;
- There were tools and elements capable of structuring the coordination of an operation in the line structures: Line Deputy, Operational Worksheet, Regulation, Periodic Meetings and Timekeeper, which were used by the grantees in the two moments;
- In a part of the lines, the artisanal transport operation was well structured in the two moments and had a few operational elements similar to those used by the Brazilian bus operators;
- The non-association of the lines to the cooperatives gave the grantee higher flexibility, enabling him to choose at any time whether to associate or not with the Union or the Cooperatives. This flexibility, however, made it impossible for the cooperatives to coordinate the operation, unify services or standardize and improve customer service. The results were disorganization of the operations, low productivity and fall in turnover;
- The possibility of the cooperatives operating together could be possible only through a partnership between these entities, which often hurts corporatism and the existing individual interest inside each of these organizations;
- The absence of a management strategy and objectivity weakened the success of the initiatives of the public policies by a section of the grantees, mainly because they did not structure themselves in order to have a decisive solution for the problem.

BIBLIOGRAPHY

- OLIVEIRA, C. C., (1989) "Conceitos Básicos sobre a Regulamentação Governamental dos Transportes Urbanos" in *Revista dos Transportes Públicos*, year 10, mar., pp. 15-27.
- CDTC-RMG (2000) Deliberação 01/2000 Projeto Transporte Cidadão. Deliberação 01/2000, Goiânia-GO.
- CDTC-RMG (2000) Deliberação 02/2000 Autoriza o funcionamento provisório do serviço de transporte alternativo na RMG. Deliberação 02/2000, Goiânia GO, Brazil
- CDTC-RMG (2001) Deliberação 05/2001 Fixa os prazos para o fim do processo de outorga provisória para o transporte alternativo. Deliberação n#5/2001, Goiânia-GO.
- BARBOSA, R. L. (2002) "O princípio da participação em gestão ambiental: a fronteira entre gerir e gestar".. Tese de MSc. UnB, Brasília, Brazil.
- BARBOZA, K.F.F. (2002) Regulamentação do Transporte Público Alternativo: A Experiência Brasileira. M.Sc., COPPE/UFRJ, Rio de Janeiro, RJ, Brazil.
- RIBEIRO, R.G. (2004) A GUERRA DOS CENTAVOS: a produção de transporte público coletivo por autônomos em Goiânia. Tese de M.Sc., COPPE/UFRJ, Rio de Janeiro, RJ, Brazil.

- VISCUSI, W. K., VERNON J. M. e HARRINGTON JR. J. E. (1995) *Economics of Regulation and Antitrust.* 2 ed. Cambridge, The MIT Press. USA.
- SANTOS, E. M. (2000) Concentração em Mercados de Ônibus Urbanos no Brasil: Uma Análise do Papel da Regulamentação. Tese de D.Sc., COPPE/UFRJ, Rio de Janeiro, RJ, Brazil.
- CROSS, J., MATTOSO, J., ROSSIGNOTTI, G., KRUSE, T. e MURRAY, J. (2001) "Interactive Conference on Organized Labour in the 21st Century: Organizing the Informal Sector". in: <http://www.oit.org/public/english/bureau/inst/project/network/infsect.ht> Access sept, 26. 2002.
- GRZYBONSKI, C., FAVERET, P. F., CRUZ, C. A. (1998), "Desemprego Estrutural e Possibilidades de Saída". In: ANTEAG, Empresa Social, administração autogestionária e Globalização uma possibilidade de trabalho permanente, São Paulo, ANTEAG. Brazil
- BALASSIANO, R., BRAGA, M. G. C. (2000) "Competição no Transporte Rodoviário de Passageiros: O Caso do Rio de Janeiro". In: Santos, E. e Aragão, J. (eds), *Transporte em Tempos de Reforma Ensaio Sobre a Problemática*, Brasília, LGE. Brazil
- OLSON, M. (1999) A lógica da Ação Coletiva: os benefícios públicos e uma teoria dos grupos sociais. São Paulo, EDUSP. Brazil