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Active transparency ranking of municipalities in the Brazilian state of Minas Gerais: evaluation of transparency portals based on the Access to Information Law

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Abstract

Active transparency is a dimension of public transparency provided for in the Right to Information Act, which provides for the disclosure of non-confidential information by public agencies, regardless of requests. This article aims to evaluate the online portals of a random sample of 197 municipalities in the 13 geographic regions of the state of Minas Gerais, with over 10,000 inhabitants, using the General Active Transparency Index (GATI), calculated based on the law and the principles of open government data. The Evaluation of Active Transparency for Public Entities, developed by the Public Transparency Program of Fundação Getulio Vargas was adapted and used for the study. The ranking shows that 72% of the portals are rated below 50, on the maximum scale of 100. There is also a large disparity between scores and the trend of greater transparency in the most populous cities, equal to or greater than 60. The results confirm previous studies that indicate high levels of opacity in the local public administration, mainly in smaller municipalities. The study contributes to the still relatively scarce literature about transparency at the municipal level, in the light of the principles of open government data, in the Brazilian state with the most municipalities.

Keywords: Right to information. Transparency of Public Administration. Local governments. Acess to Information Law.

Ranking de transparência ativa de municípios do Estado de Minas Gerais: avaliação à luz da Lei de Acesso à Informação

Resumo

Transparência ativa é uma dimensão da transparência pública, prevista na Lei de Acesso à Informação, que impõe aos órgãos públicos a obrigação de divulgar informações não confidenciais, independentemente de solicitação. O objetivo deste artigo é avaliar os portais eletrônicos de transparência por meio de uma amostra aleatória de 197 municípios das 13 regiões geográficas do Estado de Minas Gerais, com mais de 10 mil habitantes, utilizando o Índice Geral de Transparência Ativa, calculado com base na lei e nos princípios de dados abertos governamentais. A metodologia utilizada, com adaptações, foi a Avaliação de Transparência Ativa para Entes Públicos, desenvolvida pelo Programa de Transparência Pública da Fundação Getulio Vargas. O *ranking* mostra que, na escala máxima de 100, 72% dos portais estão classificados abaixo de 50. São observadas grande disparidade de pontuações e tendência a maior transparência nas cidades mais populosas, embora 22 municípios com menos de 50 mil habitantes (11% da amostra) tenham atingido índice igual ou superior a 60. Resultados confirmam estudos anteriores que indicam altos níveis de opacidade da gestão municipal, principalmente em municípios menores. Merece destaque a contribuição deste estudo para a literatura ainda relativamente escassa sobre transparência pública no âmbito municipal – à luz dos princípios de dados abertos governamentais – no estado brasileiro com o maior número de municípios.

Palavras-chave: Direito à informação. Transparência na administração pública. Governos locais. Lei de acesso à informação.

Ranking de transparencia activa de los municipios del Estado de Minas Gerais: evaluación bajo la Ley de Acceso a la Información

Resumen

La transparencia activa es una dimensión de la transparencia pública, prevista en la Ley de Acceso a la Información, que impone a los organismos públicos la obligación de divulgar información no confidencial, independientemente de solicitud. El artículo evalúa los portales electrónicos de los municipios del Estado de Minas Gerais, con más de 10.000 habitantes, a través del Índice General de Transparencia Activa (IGTA), calculado en base a la ley y los principios gubernamentales de datos abiertos. La metodología utilizada, con adaptaciones, fue la evaluación de transparencia activa de las entidades públicas, desarrollada por el Programa de Transparencia Pública de la Fundação Getulio Vargas. El ranking muestra que el 72% de los portales se clasifica por debajo de 50 en un escala máxima de 100. Hay una gran disparidad en los puntajes y una tendencia de mayor transparencia en las ciudades más pobladas, aunque 22 municipios con menos de 50 mil habitantes (11 % de la muestra) han alcanzado índices iguales o superiores a 60. Los resultados confirman estudios previos que indican altos niveles de opacidad en la gestión municipal, principalmente en municipios más pequeños. Cabe mencionar la contribución de este estudio a la literatura todavía relativamente escasa sobre transparencia pública a nivel municipal – a la luz de los principios gubernamentales de datos abiertos en el estado brasileño con mayor número de municipios.

Palabras clave: Derecho a la información. Transparencia en la administración pública. Gobiernos locales. Ley de acceso a la información.

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INTRODUCTION

Transparency is considered one of the basic principles of public governance (World Bank, 2016). In this article, transparency is defined as the citizen's access to government information available on the internet. The interest in official websites is justified by the fact that they are the most accessible way, reliable and durable dissemination of updated public information (Tavares & Cruz, 2020).

As a precondition for integrity and accountability,

> [...] transparency enables citizens to participate and monitor the activities of local governments. And if the actors in the local governance system are prone to the clear disclosure of information, rules, plans, budgets, processes, actions and results, it is more difficult to hide corruption (Transparency International, 2015, p. 8).

The pandemic caused by the new coronavirus spelled out the importance of disclosing open data, both on the disease and the health system infrastructure, how much spending on emergency hiring that public managers were forced to make to face COVID-19 (Open Government Partnership, 2020).

The relevance of transparency, in general and at the local level, can be seen, mainly, from the perspective of preventing and fighting corruption. In Brazil, there is still a great disparity between national (federal government) and subnational (states and municipalities) mechanisms for controlling corruption (Transparência Internacional Brasil, 2020).

Operations of the Comptroller General of the Union (CGU), together with the Federal Police and other supervisory bodies, have revealed that a large part of deviations from public funds occurs in municipal management. From 2003 to 2020, 480 investigative actions were launched, which resulted in losses of approximately BRL 5.4 billion. Public health and education policies are the most affected and account for about 70% of frauds (Controladoria-Geral da União [CGU], 2020).

In this context, the Law nº 12.527 (Lei nº 12.527, 2011), Access to Information Law (AIL), is considered a milestone in the process of opening public administration information, whose opacity was accentuated during the military dictatorship, from 1964 to 1985. AIL has become one of the main instruments for promoting transparency, within the scope of the Union, states, municipalities and the Federal District (FD).

In addition to defining advertising as a rule and secrecy as an exception, AIL establishes other guidelines: disclosure of information of public interest, regardless of request (active transparency); use of means of communication made possible by information technology; fostering a culture of transparency and social control in public administration (Lei nº 12.527, 2011).

This research evaluates transparency in a broader sense than the mere compliance with legal requirements, when assessing the availability of information regarding processability, accessibility, non-discrimination and free license (Barros & Rodrigues, 2017; Moncau, Michener, Barros & Velasco, 2015).

By requiring that information be made available in an open format, Brazilian law has become the first, worldwide, to incorporate the principles of open government data, especially regarding active transparency (Possamai, 2018).

The methodology adopted in this study to evaluate active transparency, as it is based on the principles of open data, presents a differential in relation to other investigations, which do not take into account factors associated with the functioning of portals and the ease of access to information.

The aim of this study is to fill a gap that still persists in the transparency literature, since most research evaluates the level of openness of information from state and federal governments. In Brazil, small municipalities face difficulties in adapting to the law. The percentage of those who meet the requirements is still very low, as shown by some studies, whose object is still concentrated mainly in cities located in the states of the South and Southeast regions of the country.

Thus, the main finding of this research is the empirical finding of a paradox, still little explored by the bibliography on transparency of municipal entities. Although small towns have a tendency to high rates of opacity, it appears that some governments of municipalities with a population of less than 50 thousand inhabitants manage to achieve high levels of transparency.

Composed mostly of small municipalities, the sample of this research, representative of all regions of the state, differs from studies that focus on capitals or large cities. In the ranking of 197 municipalities in Minas Gerais, with more than 10 thousand inhabitants and obliged to comply with the minimum requirements of active transparency provided for in AIL, there are 156 with a population of up to 50 thousand people.

The choice of Minas Gerais, the state with the largest number of municipalities (853) and the second most populous in the country, is justified by its historical problems of regional inequalities, researched by Amaral, Lemos and Chein (2010).

In the first study that calculated the disaggregated Human Development Index (HDI) for each federation unit, the state was classified in the intermediate stratum (United Nations Development Program [UNDP], Instituto de Pesquisas Aplicadas [IPEA], & Fundação João Pinheiro [FJP], 2020). Brazil is the seventh most unequal country in the world, behind African nations only (UNDP, 2020). For these reasons, Minas Gerais can be considered a kind of microcosm of the reality of the 27 Brazilian states.

In addition to this introduction, this article is structured as follows: the second section presents a brief history of the right to access information in the world and the theoretical framework of public transparency, access to information, open data; in the third section, the main legal topics of active transparency are addressed and their application in the municipalities; the next section details the methodological procedures; the fifth section presents the results and discussions; then, final considerations point out the main contributions of the research and suggestions for new studies.

ACCESS TO INFORMATION, PUBLIC TRANSPARENCY AND OPEN DATA

Provided for in the United Nations Universal Declaration of Human Rights (UN), of 1948, the right of access to information on public administration is included, in 2003, in the United Nations Convention against Corruption, approved by Brazil in 2006, as one of the measures to prevent this practice and its links with organized crime, which came to be seen by the international community as a global problem.

The Model Inter-American Law on Access to Public Information, based on ten principles approved in 2010, is adopted as a parameter by Brazilian law (Organization of American States [OAS], 2010).

As of 2011, when the Brazilian AIL is sanctioned, another 40 countries create their rules. Brazil was the 89th of the 128 countries that implemented a specific law on access to information. Ghana was last in 2019 (Global Right to Information Rating, 2020).

Conceptually, the right to information can be defined as the set of legal principles that aim to guarantee access to information about people or organizations, collected and stored in public or private databases, as well as government information, except for those protected by the right to privacy or by commercial and state secrets, provided by law (Cepik, 2000).

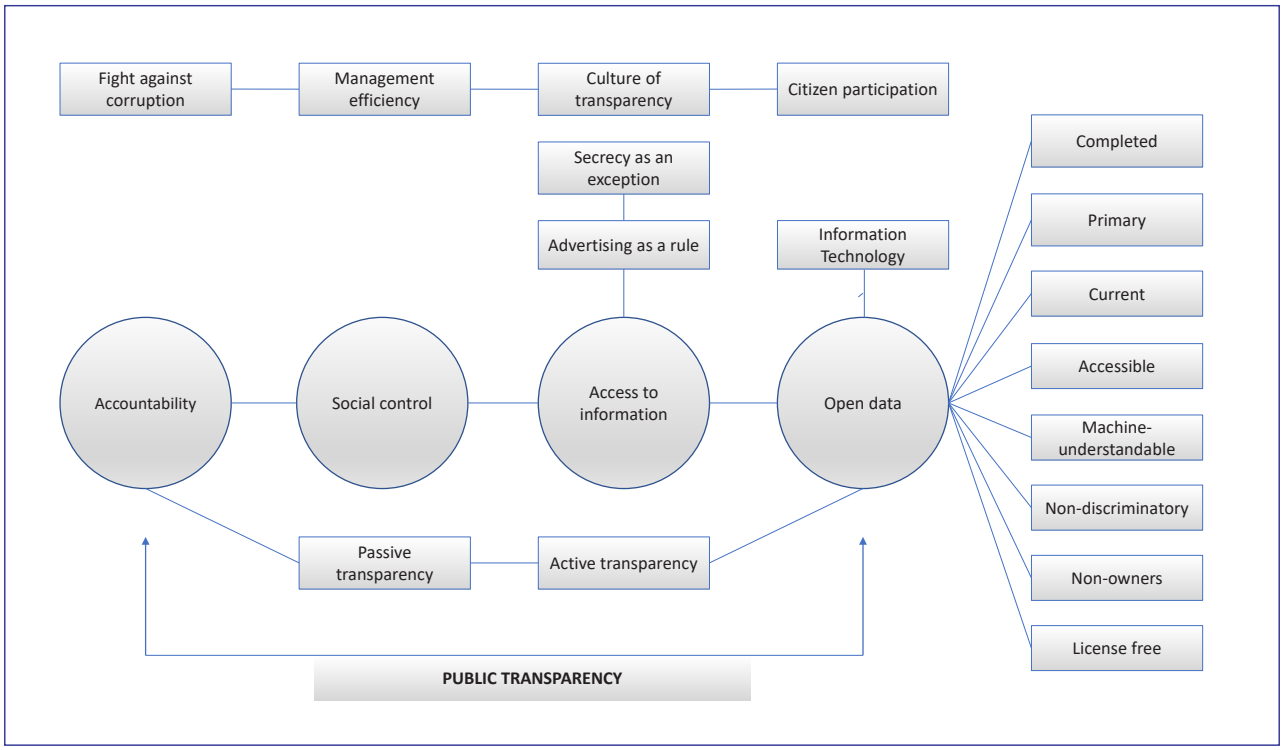
This right is directly associated with public transparency, which makes it possible for citizens to learn about government actions. For Bahur and Grimer (2012); Cunha (2018); Jardim (1995); Michener and Bersch (2013); Zuccolotto, Teixeira and Riccio (2015), transparency is still a concept in the construction process, being the subject of multidisciplinary studies.

For the World Bank, transparency is the "[...] Citizens' access to publicly available information about people's actions in government and the consequences of those actions" (World Bank, 2016, p. 81).

As for the initiative, public transparency is distinguished in: i) active – periodic dissemination of information of general or collective interest, regardless of request and ii) passive – obligation of the public entity to give access to all information requested by the citizen, except that protected by secrecy (Yazigi, 1999).

Of particular interest to this study, active transparency is also defined as the periodic and systematic dissemination of public information, resulting from voluntary actions by managers or from legal obligations imposed on state agencies to publish essential information for citizens to assess government performance (Zuccolotto et al., 2015). Figure 1 shows the main elements of the concept of public transparency.

Figure 1
Main elements of the concept of public transparency



Source: Elaborated by the authors.

The so-called "eight open data principles" were created in 2007 in California by researchers, representatives of civil society organizations and American activists, pioneers in the use of open data to promote transparency, with attention to government information (Tauberer, 2014).

By open government data, we understand those that can be freely used, reused and redistributed by anyone. They are governed by three laws: i) if the data cannot be found and indexed on the web, it does not exist; ii) if it is not open and available in a machine-understandable format, it cannot be reused and iii) if a legal device does not allow its reapplication, it is not useful (Eaves, 2009).

Although it does not mention the term "open data", article 8 of the AILdetails the content and requirements of the information that must be made available in active transparency: search tools, format, possibility of recording, automated access, open, structured, machine-readable and non-proprietary data (Lei nº 12.527, 2011).

However, analyzing the multiple dimensions of transparency and its role in promoting accountability, as well as social control in public administration, goes beyond the objectives of this article.

AIL APPLICATION IN MUNICIPALITIES

This section summarizes the main AIL provisions that address active transparency and mentions recent official research and studies that assess transparency at the municipal level. The first articles of the law deal with:

i) its applicability in the scope of the Union, States, Federal District and Municipalities;

ii) guidelines for its application and principles that guide the right of access to information;

iii) definition of terms adopted by it;

> iv) [...] duty to guarantee access to information through objective and agile procedures, in a transparent, clear and easy to understand language;
>
> v) [...] political-institutional guidelines for information access, protection and management;
>
> vi) [...] protection of information, ensuring its availability, authenticity and integrity; protection of confidential and personal data and access restrictions;
>
> vii) content, scope and form of exercising the right of access to information (Lei nº 12.527, 2011).

In addition to M devices that encourage proactivity in the dissemination of information, art. 8th, paragraph 1st da AIL expressly refers to active transparency as a duty of public bodies. It also lists the minimum information that must be disclosed, regardless of request (Lei nº 12.527, 2011).

The list is not exhaustive, it is up to public entities to define other information of collective or general interest, to be disclosed by active transparency, except for the legal exceptions of confidentiality.

Research carried out by Pinho (2008) shows that more developed municipalities have better economic, social, political, technological conditions to implement and maintain electronic portals and, consequently, to disseminate more public information.

A study by Cruz, Ferreira, Silva and Macedo (2012) also points to a trend towards greater transparency in the management of more populous municipalities. Most recent investigations by Michener, Contrera and Niskier (2018); Sell, Sampaio, Zonatto and Lavarda (2018), confirm this relationship between transparency and population size of municipalities, among other factors.

Two institutional assessments on transparency in Brazilian municipalities and states also point to the relationship between the size of cities and the opacity of their management: the National Transparency Ranking (*Ranking Nacional de Transparência* - RNT), carried out by the Federal Public Ministry (*Ministério Público Federal [MPF]*, 2015, 2016) and the Transparent Brazil Scale (*Escala Brasil Transparente* - EBT), prepared by CGU in four editions, in the years 2015 (two editions), 2017 and 2018.

RNT is a diagnosis of compliance with legal requirements for active transparency, with an emphasis on AIL, by all municipalities, states and the FD. The second evaluation for the RNT, shows the average of 4.5 (on a scale of 0 to 10) of the transparency index of 344 municipalities in Minas Gerais with a population between 10 thousand and 100 thousand inhabitants. In the four cities with more than 500 thousand inhabitants, the average rises to 7.6 (MPF, 2015, 2016).

EBT, in the last two surveys, carried out in 2018 and 2020, in addition to passive transparency, measured the active transparency of the states, the DF and 665 municipalities with more than 50 thousand inhabitants, including the capitals, 72 of them located in Minas Gerais.

The results of the EBT 360º – 2nd edition show a national average of 6.9 (from 0 to 10) in all Brazilian municipalities evaluated and 8.8 in state capitals. The average in municipalities in Minas Gerais is 6.6 and 7.9, when considering only the four cities in the state with populations above 500 thousand inhabitants. These average transparency indexes of EBT 360º in largest cities, significantly higher than those of the RNT/MPF, also reinforce the findings of other studies that associate higher levels of transparency with larger municipalities (CGU, 2021).

Most academic research is also focused on evaluating large cities. García-Sánchez, Aceituno and Domínguez (2013) analyze public transparency in Spanish municipalities with more than 250 thousand inhabitants or provincial capitals. Coelho, Silva, Cunha and Teixeira (2018) examine the transparency of the executive branch of states, capitals and other Brazilian municipalities with more than 400 thousand inhabitants. The study organized by Michener (2016) evaluates only states and capitals. Cruz et al. (2012), just as Fiirst, Costa, Baldissera and Asta (2017) verify the level of electronic transparency of the 100 most populous municipalities in Brazil.

METHODOLOGICAL PROCEDURES

The active transparency assessment aims to assess the compliance of the mandatory information, provided for in article 8 of the AIL, which must be made available on the electronic portals. The evaluation of the item "Frequently asked questions", which is not included in the original methodology, was inserted due to its importance in clarifying the most common doubts of citizens, in addition to legal requirements (Lei nº 12.527, 2011).

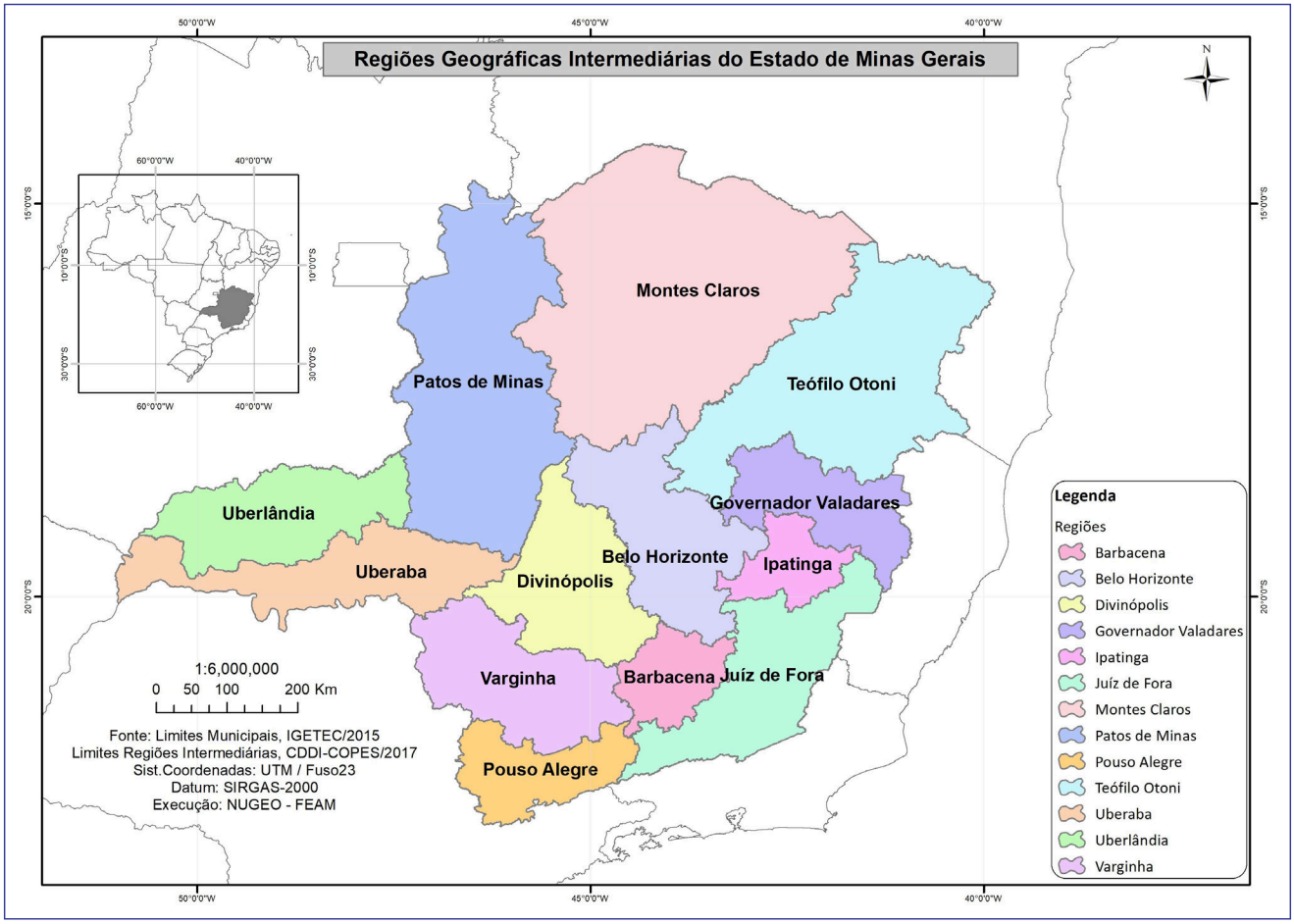
The "Active Transparency for Public Entities" evaluation methodology was adopted, developed by the Fundação Getulio Vargas' Public Transparency Program (FGV PTP), between 2014 and 2018. Its objective is to evaluate and measure the level of active transparency of electronic portals of public agencies, in the light of AIL (Fundação Getulio Vargas [FGV], 2019).

The ranking was prepared based on the General Active Transparency Index (GATI), calculated through a score attributed to each item of information published on the websites of city halls. Data were collected between December 2018 and June 2019.

Sample selection

The sample size of the research was defined in 197 municipalities, assuming an estimation error of 0.05, 95% confidence level and initial estimate for a proportion equal to 0.5. This number corresponds to 52.2% of the 377 municipalities in the state with a population greater than 10,000 inhabitants (Instituto Brasileiro de Geografia e Estatística [IBGE], 2018). Rosa, Bernardo, Vicente and Petri (2015), when assessing active transparency in cities in the southern region of Brazil, they adopt the same sample size, with similar parameters. Minas Gerais has 13 Intermediate Geographic Regions (IGR), as shown in Figure 2.

Figure 2
Intermediate geographic regions of Minas Gerais



Source: Fundação Estadual do Meio Ambiente (FEAM, 2019).

A after weighting the population ranges of the municipalities of each IGR, the sample was selected using the table of random numbers published by Scheaffer, Mendenhall and Ott (1990). Table 1 shows the total number and municipalities with more than 10,000 inhabitants, total population and cities sampled by region.

Table 1
Number of municipalities, population and percentages of total and sampling by IGR

IGR	Abbr.	nº of mun.	Total Pop.	+10K inhab.	Pop. sample	Mun. sample
Belo Horizonte	BHZ	74	6,028,392	42	4,580,134	22
Montes Claros	MOC	86	1,277,302	36	870,326	19
Teófilo Otoni	TEO	86	1,420,605	42	555,103	22
Gov. Valadares	GOV	58	773,517	19	430,581	10
Ipatinga	IPA	44	1,028,017	18	534,883	10
Juiz de Fora	JUF	146	2,347,851	49	1,292,738	25
Barbacena	BAR	49	781,253	16	340,786	8
Varginha	VAR	82	1,637,101	46	736,236	23
Pouso Alegre	POA	80	1,652,265	37	530,309	19
Uberaba	UBR	29	781,136	15	490,089	8
Uberlândia	UBL	24	1,169,426	12	914,891	7
Patrocínio	PAT	34	825,366	17	396,800	9
Divinópolis	DIV	61	1,318,071	28	680,092	15
Total		853	21,040,662	377	12,362,968	197

Source: Elaborated by the authors based on IBGE data (2018).

Evaluation criteria

The methodology is based on the eight principles of open government, emphasizing that accessibility, non-discrimination and free license are analyzed in a unified way. The criteria for assessing the completeness of information are applicable to the following items: i) Organizational structure (OS), ii) Programs and Actions (PA), iii) Expenditure (E), iv) Bids (B), v) Contracts (C), vi) Transfers and onlendings (TO and vii) Frequently Asked Questions (FAQ).

Calculation of active transparency

In the score from 0 to 100, attributed to each portal, the GATI is obtained by the average of the sum of points of the items of mandatory disclosure, measuring the content of the information, the navigation structure and the presentation of the data and the portal itself. The score for each category is the result of the completeness score multiplied by the principle contemplated in that item.

The principles were divided into two categories, each weighing 50%, taking into account: i) the content of the data (completeness, primacy, processability and timeliness) and ii) the use of the portal (accessibility, non-discrimination and free license).

The accessibility score is the average of the inclusion scores, ease of access and usability.

Regarding the quantitative items (E, B, C and TO), the completeness assessment is divided into essential and non-essential dimensions. The completeness score is obtained by the sum of the assessment of essential elements, equivalent to 70% of the final grade, with the complementary ones (30%).

The final GATI score is equivalent to the sum of the scores for each item, where (LC) is the average of these two items, calculated by the following equation:

$$GATI = \frac{(OS + PA + FAQ) + E + LC + TO}{450} \quad (1)$$

The maximum GATI value (45 thousand points) corresponds to the sum of the highest possible score of all evaluated items divided by 450, to be reduced on a scale from 0 to 100 (FGV, 2019).

RESULTS AND DISCUSSIONS

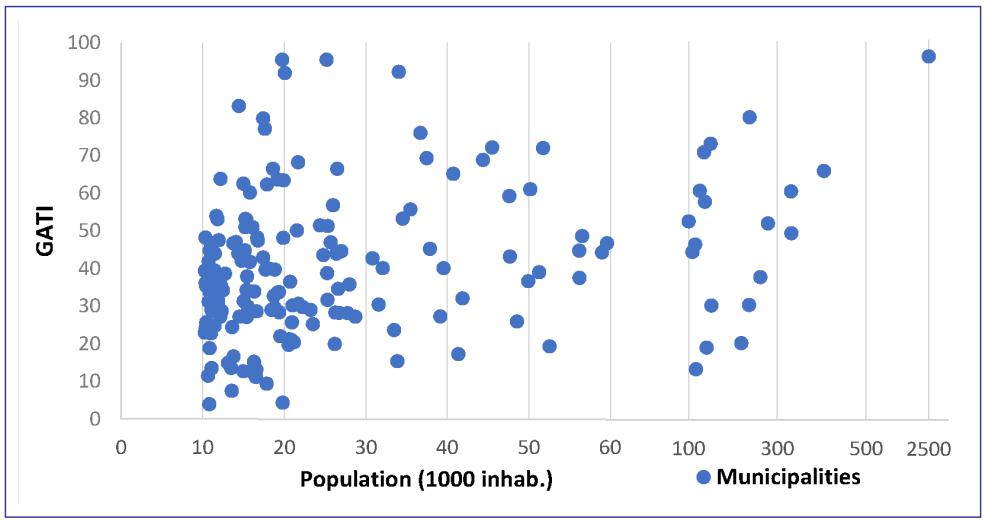
This section presents the main results and discussions on the active transparency assessment of the sampled municipalities. The general GATI ranking of the 197 municipalities evaluated, with the respective IGR, population and scores for each portal, is presented in Appendix 1.

The results show that 142 municipalities (72.1% of the sample) have GATI below 50, of which only 17 (8.6%) have a population greater than 50 thousand inhabitants. The score of 113 municipalities (57.4%) is below the simple general average of GATI (42.5 points). Of these, only 10 (5.1%) have more than 50 thousand inhabitants.

If considered the highest average of the GATI, weighted by the population (58.9 points), 161 (81.7%) municipalities evaluated with insufficient transparency indexes, among which 26 (13.2%) have a population above 50 thousand residents.

In the less populous brackets, there is a large concentration of municipalities with GATI below 50. The dispersion of more transparent municipalities stands out in the larger population ranges. Graph 1, in which each point represents a city, shows the concentration of small municipalities assessed at very low levels of transparency.

Graph 1
Distribution of municipalities by GATI brackets



Source: Elaborated by the authors.

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Among the 176 municipalities with a population of up to 100 thousand inhabitants, only 43 (24.4%) reach GATI equal to or greater than 50 points. Among them, of the 165 municipalities with less than 60 thousand inhabitants, 130 (78.8%) are evaluated with GATI of up to 50 points. In the 102 municipalities with a population of up to 20 thousand people, 85 (83.3%) obtain an index below 50.

In the most transparent range, of the 21 municipalities with a population over 100 thousand inhabitants, 11 (52.3%) have the GATI above 50. In percentage terms, these most populous municipalities, with an above-average transparency index, correspond to more than twice the 24.4%, in the same range, with less than 100 thousand residents.

In four of the five municipalities with more than 400 thousand inhabitants (Belo Horizonte, Contagem, Montes Claros and Juiz de Fora), where approximately 4.4 million people live (35.7% of the sample population), the average GATI exceeds 80 points.

Based on the sample, it is possible to estimate how much of the 377 municipalities required to provide information through active transparency have above average GATI. Only 60 to 90 (16% to 24%) have an index above 50. That is, 76% to 84% of these municipalities are below the average score for active transparency.

These results are supported by the literature that indicates the positive relationship between population size and transparency levels in municipalities, such as the research by Alcaide-Muñoz, Bolívar and Hernández (2016); Baker (1997); Baldissera (2018); Coelho et al. (2018); Cunha, Coelho, Silva, Cantoni and Teixeira (2016); Fiirst et al. (2017); García-Sánchez et al. (2013); Guillamón, Bastida and Benito (2011); Keerasuntonpong, Dunstan and Khanna (2015); Lowatcharin and Menifield (2015); Michener et al. (2018); Norris (1999); Pinho (2008); Rosa et al. (2015).

However, the results of much of the cited literature also show that the number of inhabitants is not the only factor determining the level of transparency of municipal entities. These studies cite socioeconomic, human development, per capita income, party affiliation and other factors to explain municipal transparency. The analysis of indicators of part of the evaluated municipalities that present the best and worst transparency indexes, in each region, corroborates the evidence from previous studies, confirming other explanatory factors of transparency in cities.

Table 2 shows data from the Human Development Index (MHDI), of the Firjan Municipal Development Index (FMDI) and Gross Domestic Product (GDP) per capita, released by IBGE, of each most populous municipality and with the lowest GATI by region.

Table 2
Most populous municipality and with the lowest GATI by region

IGR	MUNICIPALITY	POP.	GATI	MHDI (2010)	FMDI (2016)	GDP PER CAPITA (BRL) (2017)
BHZ	Belo Horizonte	2,501,576	96	0.810	0.8219	35,245.02
	Santa Luzia	218,147	20	0.715	0.6917	12,879.33
MOC	Montes Claros	404,804	66	0.770	0.7582	22,303.13
	Matias Cardoso	11,050	14	0.584	0.6561	12,185.51
TEO	Teófilo Otoni	140,235	19	0.701	0.7065	16,667.07
	N. Oriente de Minas	10,731	4	0.555	0.5648	7,538.73
GOV	Gov. Valadares	278,685	52	0.727	0.7931	20,957.24
	Virginópolis	10,537	12	0.675	0.6176	12,967.44
IPA	Ipatinga	261,344	38	0.771	0.7706	36,993.39
	Bela Vista de Minas	10,248	23	0.674	0.7032	20,977.84
JUF	Juiz de Fora	564,310	60	0.778	0.7954	28,355.07
	Abre Campo	13,465	7	0.654	0.6414	13,453.99
BAR	Barbacena	136,392	58	0.769	0.7516	19,631.86
	Barroso	20,720	21	0.734	0.7184	18,446.04
VAR	Varginha	134,477	71	0.778	0.8224	40,506.11
	Areado	14,955	13	0.727	0.6488	15,116.55

Continuation

IGR	MUNICIPALITY	POP.	GATI	MHDI (2010)	FMDI (2016)	GDP PER CAPITA (BRL) (2017)
POA	Pouso Alegre	148,862	73	0.774	0.8274	50,211.91
	Bueno Brandão	11,010	13	0.658	0.6237	12,266.35
UBR	Uberaba	330,361	60	0.772	0.8194	40,066.32
	Fronteira	17,701	9	0.684	0.6641	61,932.58
UBL	Uberlândia	683,247	48	0.789	0.8306	50,548.78
	Campina Verde	19,738	4	0.704	0.6888	25,328.11
PAT	Patos de Minas	150,833	30	0.765	0.8586	29,020.34
	Brasilândia de Minas	16,321	11	0.674	0.6739	13,612.32
DIV	Divinópolis	235,977	30	0.764	0.7916	25,695.97
	Dores do Indaiá	13,541	24	0.719	0.7239	15,236.95

Source: Elaborated by the authors based on the Federação das Indústrias do Estado do Rio de Janeiro (FIRJAN, 2018), IBGE (2018) and UNDP, IPEA and FJP (2020).

The Brazilian MHDI is composed of the same indicators as the three dimensions of the global HDI: longevity, education and income – 0.731 is the HDI of the State of Minas Gerais. The FMDI assesses the socioeconomic development of Brazilian municipalities in three areas: employment and income; education; and health. It ranges from 0 to 1 point in moderate development (0.6 to 0.8) and high (0.8 to 1). Municipal GDP per capita measures the total value of final goods and services produced per inhabitant. Corresponds to the average contribution of each resident in the municipality to the added value in the different economic sectors. In 2018, Brazil's GDP per capita was BRL 33,593.82 (IBGE, 2020).

The data reveal that, in the 13 geographic regions, the most populous city also presents human development and GATI indicators significantly higher than the less transparent municipality, which, in turn, presents much lower indicators.

In nine regions, the GATI of the most transparent municipality corresponds to more than four times that of the most opaque. In seven regions, the value of GDP per capita corresponds to more than double that of the municipality with the lowest GATI. Only in the Uberaba IGR, the least transparent municipality (Fronteira) has a GDP per capita higher than that of the most populous. In eight IGRs, the least transparent municipalities have MHDI and FMDI among the lowest in the state.

These results, which link higher socioeconomic and human development indices to positive impacts on levels of municipal transparency, reinforce those presented by Alcaide-Muñoz et al. (2016); Batista (2017); Comin, Ramos, Zucchi, Favretto and Fachi (2016); Jacques, Quintana and Macagnan (2013); Lowatcharin and Menifield (2015); Sell et al. (2018); Serrano-Cinca, Rueda-Tomás and Portillo-Tarragona (2009); Silva and Bruni (2019) and Tavares and Cruz (2020).

The most relevant finding of this research – which opposes the trend indicated by the literature – is the high level of transparency achieved by small municipalities. Of the 35 municipalities with the highest ranking in the ranking (GATI ≥ 60), 22 have a population of less than 50 thousand inhabitants. Table 3 shows the nine most transparent municipalities in this population range, with GATI ≥ 70 points, its position in the general ranking and respective indicators.

Table 3
Municipalities with less than 50 thousand inhabitants and GATI ≥ 70

MUNICIPALITY	IGR	POS.	POP.	GATI	MHDI (2010)	FMDI (2014)	GDP PER CAPITA (BRL) (2017)
Simonésia	JUF	2º	19,528	96	0.632	0.5815	9,696.43
Espera Feliz	JUF	3º	24,773	96	0.663	0.6615	15,947.82
Taiobeiras	MOC	4º	33,858	92	0.670	0.6982	12,995.29
Lajinha	JUF	5º	19,928	92	0.661	0.6868	15,429.37
Rio Piracicaba	IPA	7º	14,346	83	0.685	0.6557	34,935.30
S. Domingos do Prata	IPA	9º	17,393	80	0.690	0.6383	13,557.94
Resplendor	GOV	12º	17,398	77	0.670	0.6211	12,525.82
Extrema	POA	13º	35,474	76	0.732	0.8357	219,239.07
Caeté	BHZ	15º	44,377	72	0.728	0.6867	13,021.84

Source: Elaborated by the authors based on FIRJAN (2018), IBGE (2018) and UNDP, IPEA and FJP (2020).

Except for the municipalities of Extrema, with the 2nd highest GDP per capita in the state and high MHDI and FMDI, and Rio Piracicaba, whose GDP is also much higher than that of the other municipalities, all others have low socioeconomic and human development indicators. The GATI of these municipalities exceeds that of 38 others in the sample whose population is over 50 thousand inhabitants; among them, 18 with more than 100 thousand people.

FINAL CONSIDERATIONS

In general, the results reveal very low levels of active transparency in the municipalities of Minas Gerais, with a general average weighted by the population of 58.9. The 92% amplitude of GATI scores raises questions about other factors that determine transparency at the municipal level, such as party affiliation, neighborhood effect, associativism, bureaucratic capacity and others, pointed out by other researches, such as the one carried out by Batista (2017).

One of the limitations of this research is the evaluation restricted to active transparency. In this modality of transparency, information and open data can be selected and "sanitized" through the mediation of public managers, as noted by Michener et al. (2018, p. 611).

Research in Gaúchos municipalities, conducted by Santos and Visentini (2018), also concludes that data made available in active transparency goes through an administrative filter, compromising the effectiveness of AIL. In this case, studies are suggested to assess passive transparency, mainly in small municipalities, which are still scarce in the literature on transparency.

Although important, the socioeconomic situation is not the only factor to be taken into account for the analysis of transparency at the municipal level. The methodology used in this research does not allow to deduce the explanatory variables or determinants that would impact on the GATI of all evaluated municipalities, although the socioeconomic and human development indicators of the more and less transparent administrations point to this causal relationship. It is also suggested to carry out studies with this focus.

Public transparency, in addition to providing and accessing information, comprises disclosing it in a complete, relevant, reliable, pertinent and timely manner (Grau, 2005). This is another promising field for qualitative research, whose core is in the investigation of language adequacy, organization and updating of information, which impact transparency.

The main finding of this research raises questions of great relevance. What are the explanatory factors for the high transparency of 22 municipalities with a population of less than 50 thousand inhabitants, who reach a GATI of more than 60 points? Qualitative studies, based on interviews with managers and employees in the areas of management and information and communication technology, become essential to investigate the causes of the positive performance of transparency levels in these small municipalities.

Why do cities with more precarious administrative structures and scarce human and financial resources have good levels of transparency? What is the role of public managers in achieving these results? A better understanding of this phenomenon is essential for greater inspection by organized civil society and control bodies, which would result in increased public transparency at the local level. These investigations are still rare in the academic literature.

The results of this research are expected to subsidize policies and actions of municipal managers aimed at opening information and promoting public transparency, both in information management and in adapting official portals to legal requirements.

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APPENDIX

Table A
GATO general ranking of sampled municipalities

	MUNICÍPALITY	IGR	POP.	GATI
1	Belo Horizonte	BHZ	2,501,576	96
2	Simonésia	JUF	19,528	96
3	Espera Feliz	JUF	24,773	96
4	Taiobeiras	MOC	33,858	92
5	Lajinha	JUF	19,928	92
6	Contagem	BHZ	659,070	84
7	Rio Piracicaba	IPA	14,346	83
8	Sete Lagoas	BHZ	237,286	80
9	São Domingos do Prata	IPA	17,393	80
10	João Monlevade	IPA	79,387	79
11	Três Corações	VAR	78,913	79
12	Resplendor	GOV	17,398	77
13	Extrema	POA	35,474	76
14	Pouso Alegre	POA	148,862	73
15	Caeté	BHZ	44,377	72
16	Itabirito	BHZ	51,281	72
17	Varginha	VAR	134,477	71
18	Alfenas	VAR	79,481	70
19	Araçuaí	TEO	36,705	69
20	Machado	VAR	41,844	69
21	Monte S. de Minas	VAR	21,534	68
22	Ipaba	IPA	18,438	67
23	Belo Oriente	IPA	26,396	67
24	Montes Claros	MOC	404,804	66
25	Brumadinho	BHZ	39,520	65
26	São Romão	MOC	12,139	64
27	Ervália	JUF	18,829	64
28	Jaboticatubas	BHZ	19,858	63
29	Carmo de Minas	POA	14,769	63
30	Rio Pomba	JUF	17,858	62
31	Bocaiúva	MOC	49,942	61
32	Vespasiano	BHZ	125,376	61
33	Uberaba	UBR	330,361	60
34	Sabinópolis	GOV	15,525	60
35	Juiz de Fora	JUF	564,310	60
36	São Lourenço	POA	45,488	59
37	Barbacena	BAR	136,392	58
38	Jacutinga	POA	25,684	57
39	Itamarandiba	TEO	34,527	56
40	São João del-Rei	BAR	89,653	55
41	Caratinga	IPA	91,503	55
42	Conceição dos Ouros	POA	11,525	54
43	Ouro Preto	BHZ	73,994	54
44	Guanhães	GOV	34,057	53
45	Capitão Enéas	MOC	15,153	53
46	S. Antônio do Jacinto	TEO	11,677	53
47	Felixlândia	BHZ	15,235	53
48	Nova Serrana	DIV	99,770	53
49	Gov. Valadares	GOV	278,685	52
50	São João do Paraíso	MOC	23,524	51
51	Jequitinhonha	TEO	25,305	51
52	Pará de Minas	DIV	93,101	51
53	Entre Rios de Minas	BAR	15,214	51
54	Perdizes	UBR	16,009	51
55	Carmo do Rio Claro	VAR	21,180	50
56	Ribeirão das Neves	BHZ	331,045	49
57	Pirapora	MOC	56,208	49
58	Nova Resende	VAR	16,610	48
59	Conceição da Aparecida	VAR	10,261	48
60	Turmalina	TEO	19,797	48
61	Uberlândia	UBL	683,247	48
62	Icaraí de Minas	MOC	11,879	48
63	Lima Duarte	JUF	16,671	47
64	Virgem da Lapa	TEO	13,764	47
65	S. G. do Sapucaí	VAR	25,332	47
66	Frutal	UBR	58,962	47
67	Água Boa	TEO	13,600	47
68	São Tiago	BAR	10,922	47
69	Ubá	JUF	114,265	46
70	Matozinhos	BHZ	37,473	45
71	Bom Jesus do Galho	IPA	15,010	45
72	S. G. do Rio Abaixo	IPA	10,818	45
73	Leopoldina	JUF	52,532	45
74	Nepomuceno	VAR	26,709	45
75	Muriaé	JUF	108,113	44
76	Três Pontas	VAR	56,546	44
77	Cabo Verde	VAR	14,075	44
78	S. João Nepomuceno	JUF	26,272	44

Continuation

	MUNICÍPALITY	IGR	POP.	GATI
79	Pedras Maria da Cruz	MOC	11,453	44
80	Porto Firme	JUF	11,208	44
81	Paraopeba	BHZ	24,375	44
82	Diamantina	TEO	47,617	43
83	Poço Fundo	VAR	16,734	43
84	Campos Gerais	VAR	28,703	43
85	Brazópolis	POA	14,508	42
86	Arceburgo	VAR	10,657	42
87	Grão Mogol	MOC	15,779	42
88	Manhuaçu	JUF	89,256	42
89	Pompéu	DIV	31,583	40
90	Ouro Branco	BAR	39,121	40
91	Arinos	PAT	17,888	40
92	Malacacheta	TEO	18,700	40
93	Piranga	BAR	17,618	40
94	S. J. do Manhuaçu	JUF	11,440	40
95	Rio Acima	BHZ	10,203	39
96	Eugenópolis	JUF	11,218	39
97	Bom Despacho	DIV	50,166	39
98	Pedralva	POA	11,246	39
99	Aimorés	GOV	25,193	39
100	Jequeri	JUF	12,460	39
101	Piraúba	JUF	10,816	38
102	Itanhomi	GOV	12,212	38
103	Chapada do Norte	TEO	15,368	38
104	Ipatinga	IPA	261,344	38
105	Engenheiro Caldas	GOV	11,064	38
106	São Francisco	MOC	56,163	38
107	Lagoa Santa	BHZ	63,359	37
108	João Pinheiro	PAT	48,561	37
109	Muzambinho	VAR	20,594	37
110	Guaraciaba	JUF	10,333	36
111	Juruaia	VAR	10,441	36
112	Pitangui	DIV	27,755	36
113	Carmo da Cachoeira	VAR	12,158	36
114	Centralina	UBL	10,425	35
115	Juatuba	BHZ	26,484	35
116	Carmo da Mata	DIV	11,439	35
117	Cruzília	POA	15,358	34
118	Ilicínea	VAR	12,303	34
119	Raposos	BHZ	16,277	34
120	S. Maria de Itabira	BHZ	10,836	34
121	Divisópolis	TEO	10,820	34

Continuation

	MUNICÍPALITY	IGR	POP.	GATI
122	Borda da Mata	POA	19,202	34
123	Carmópolis de Minas	DIV	19,144	34
124	Caetanópolis	BHZ	11,495	33
125	Manga	MOC	18,594	33
126	Bonito de Minas	MOC	11,088	33
127	Salinas	MOC	41,349	32
128	Congonhal	POA	11,813	32
129	São João da Ponte	MOC	25,235	32
130	Itinga	TEO	14,956	31
131	Igaratinga	DIV	10,709	31
132	Gouveia	TEO	11,833	31
133	Caxambu	POA	21,703	31
134	Mateus Leme	BHZ	30,798	30
135	Divinópolis	DIV	235,977	30
136	Patos de Minas	PAT	150,833	30
137	Paraisópolis	POA	20,940	30
138	Itamonte	POA	15,440	30
139	Camanducaia	POA	21,738	30
140	Matipó	JUF	18,808	30
141	Alto Rio Doce	BAR	11,146	29
142	Itatiaiuçu	DIV	11,037	29
143	Luz	DIV	18,172	29
144	Carmo do Cajuru	DIV	22,257	29
145	São Gonçalo do Pará	DIV	12,218	29
146	Campanha	VAR	16,565	29
147	Serra do Salitre	PAT	11,493	29
148	Varzelândia	MOC	19,335	28
149	Francisco Sá	MOC	26,181	28
150	Coração de Jesus	MOC	26,592	28
151	Mutum	JUF	26,997	28
152	Capelinha	TEO	37,856	27
153	Alterosa	VAR	14,414	27
154	Planura	UBR	11,968	27
155	Coromandel	PAT	27,982	27
156	Campos Altos	UBR	15,356	27
157	Monte Carmelo	UBL	47,682	26
158	Urucânia	JUF	10,371	26
159	Medina	TEO	20,882	26
160	Abaeté	DIV	23,223	25
161	Estiva	POA	11,321	25
162	Dores do Indaiá	DIV	13,541	24
163	Francisco Badaró	TEO	10,343	24
164	Sarzedo	BHZ	32,069	24

Continuation

	MUNICÍPALITY	IGR	POP.	GATI
165	B. Vista de Minas	IPA	10,248	23
166	Fervedouro	JUF	10,957	23
167	Presidente Olegário	PAT	19,377	22
168	Vazante	PAT	20,537	21
169	Barroso	BAR	20,720	21
170	Ponte Nova	JUF	59,605	21
171	Monte Alegre de Minas	UBL	20,999	20
172	Santa Luzia	BHZ	218,147	20
173	Sacramento	UBR	25,989	20
174	Padre Paraíso	TEO	20,052	20
175	S.Seb. do Maranhão	GOV	10,129	20
176	Guaxupé	VAR	51,750	19
177	Teófilo Otoni	TEO	140,235	19
178	Jordânia	TEO	10,780	19
179	Andradas	POA	40,747	17
180	Santa Juliana	UBR	13,743	17
181	Ouro Fino	POA	33,481	15
182	Capinópolis	UBL	16,109	15

Continuation

	MUNICÍPALITY	IGR	POP.	GATI
183	Mar de Espanha	JUF	12,725	15
184	Matias Cardoso	MOC	11,050	14
185	Ataléia	TEO	13,064	14
186	Bueno Brandão	POA	11,010	13
187	Araguari	UBL	116,691	13
188	Poté	TEO	16,491	13
189	Areado	VAR	14,955	13
190	S. João Evangelista	GOV	15,781	13
191	Unaí	PAT	83,808	12
192	Virginópolis	GOV	10,537	12
193	Brasilândia de Minas	PAT	16,321	11
194	Fronteira	UBR	17,701	9
195	Abre Campo	JUF	13,465	7
196	Campina Verde	UBL	19,738	4
197	Novo Oriente de Minas	TEO	10,731	4

Source: Elaborated by the authors based on IBGE data (2018).

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