

# Urban mobility projects and public works funded with federal resources – contributions of TCU audits



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## ABSTRACT

This study suggests possible contributions by the Federal Court of Accounts to the achievement of National Urban Mobility Policy objectives, based on its institutional mission to collaborate with improvement of the Public Administration for the benefit of society. We present concrete cases of audits conducted in relation to urban mobility projects and public works funded with federal resources, in addition to audits of the governance of this policy, as possible avenues for improving national urban mobility.

**Keywords:** Urban Mobility; National Urban Mobility Policy; Audits of Public Projects; Performance Audit; Urban Infrastructure; External Control.

## 1. INTRODUCTION

Brazil has undergone profound geographic and demographic change in the last 60 years. According to data from the Brazilian Institute of Geography and Statistics (IBGE) (BRAZIL, 2011a), urbanization in Brazil has accelerated in the last 30 years. In 2010, around 84.4% of the country's population resided in urban areas, according to (Ibid.). The difference is striking when compared with the 75.6% urban population recorded in 1991.



From 2000 to 2010, Brazil's urban population increased by 23 million inhabitants. In other words, Brazilian cities experienced major population expansion. This, in turn, generates greater demand for public services associated with urban environments, such as sanitation, housing, public roadways and areas, public lighting and especially public transportation.

This state of affairs intensifies the demand for urban public transportation, which requires the government to take action to meet the needs of the population in this regard.

Public transportation is a public service constitutionally considered "essential in nature" (Article 30, Subsection V, of the Federal Constitution of 1988 – BRAZIL, 1988). The constitutional text assigns responsibility for providing this service to municipalities and the Federal District (cf. Article 32, § 1, of FC/1988), which can deliver the service directly or through concessions or permits.

Regarding the increased demand for public transportation in Brazil in recent years, it is worth mentioning that, according to data from São Paulo Municipality (cf. BRAZIL, 2012b), the demand for urban public transportation in the city of São Paulo grew 86% between 2002 and 2011, while the city's resident population grew 7.5% in this same period.

Studies on Line 3-Red of the São Paulo Subway indicate overcrowding of the line, with an average of 7.4 passengers/m<sup>2</sup> during peak hours, in 2015 (cf. BAR-

BOSA, 2016), whereas the Brazilian technical standard for manufacturing urban public transportation vehicles sets maximum saturation at six passengers/m<sup>2</sup> (BRAZILIAN ASSOCIATION OF TECHNICAL STANDARDS, 2009).

The role of the Federal Court of Accounts (TCU) in this situation fits into its institutional mission of helping improve Public Administration for the benefit of society (cf. BRAZIL, 2015g). In other words, it is expected that audits performed by the TCU will provide input for and indicate possible improvements in public policies, leading to greater effectiveness of the actions carried out by the Public Administration.

This study seeks to point out some important TCU oversight actions that could benefit urban mobility and public transportation.

## 2. IMPORTANT CONCEPTS REGARDING URBAN PUBLIC TRANSPORTATION

In addition to the mandates of municipalities and the Federal District in this area, the Federal Constitution of 1988 gave the Federal Government (in Article 21, Subsection XX) the mandate to establish guidelines for public transportation.

This relevant legislative mandate was materialized recently in an important reference document to help understand how the issue of urban transportation is structured in its several modes in

Brazil. The document is Law No. 12587, of 3 January 2012, which establishes the National Urban Mobility Policy (BRAZIL, 2012a).

According to Article 4, Subsection II of this legal document, the definition of urban mobility is the "condition of moving cargo and people in the urban space" (Ibid).

This law also makes clear, in Article 3, § 2, that urban transportation can be public or private in nature. It can be characterized as collective or individual and can move passengers or cargo.

The law makes only one fundamental distinction regarding urban transportation modes – motorized and non-motorized. According to the concepts presented in this law, motorized transportation is defined as a mode that uses automotive vehicles, while non-motorized transportation is a mode that uses human effort or animal traction.

This same reference document also makes important distinctions as to collective public transportation, individual public transportation and private collective transportation.

Collective public transportation is defined as a "public transportation service for passengers that is accessible to the entire local population through individual payment, with itineraries and prices set by the government" (Ibid). In turn, individual public transportation refers to a "service paid for by passengers, open to the public, through leased vehicles, for individualized trips" (Ibid).

Private collective transportation is a "transportation service for passengers that is not open to the public, with exclusive operational characteristics for each line and demand" (Ibid).

This law also presents important principles<sup>1</sup> for development of the National Urban Mobility Policy (PNMU). Particularly i) "equal access of citizens to collective public transportation"; ii) "efficiency, efficacy and effectiveness in the provision of urban transportation services"; iii) "fair distribution of the benefits and onus resulting from the use of different modes and services"; and iv) "equality in the use of public areas of transit and roadways" (Ibid.).

The guidelines<sup>2</sup> that inform this policy are also set forth in the law. Among those worth mentioning are: i) integration between urban development policies; ii) "non-motorized transportation takes priority over motorized, and collective public transportation services take priority over individual motorized transportation"; and iii) "prioritization of collective public transportation projects that structure the region and lead to integrated urban development" (Ibid).

Finally, the law also shows that efficient and effective urban mobility enables the achievement of relevant objectives<sup>3</sup>, such as: i) reduction of inequality and promotion of social inclusion; ii) promotion of access to basic services and public equipment; and iii) improvement in the urban conditions of the population, primarily in terms of accessibility and mobility.



### 3. ROLE OF THE FEDERAL GOVERNMENT IN FUNDING OF URBAN MOBILITY PROJECTS

Law No. 12587/2012 defines various instruments to regulate collective public transportation services. The provision and regulation of this type of service in Brazil, with a few exceptions, is the responsibility of municipalities and the Federal District.

Therefore, except in the case of urban interstate transportation, the role of the Federal Government is to promote development and provide technical and financial assistance to the other federative entities, according to Article 16 of this law.

In this regard, the Ministry of Cities is the body of the Direct Federal Public Administration responsible for guiding policies related to urban transportation, such as the National Urban Mobility Policy, as established in Article 27, Subsection XI, of Law No 10683, of 28 May 2003, amended by Article 12 of Law No. 13341, of 29 September 2016.

Within the structure of this Ministry is the National Transportation and Urban Mobility Department (Semob), responsible for formulating and implementing the policy of sustainable urban mobility.

The federal programs led by Semob include Growth Acceleration Program (PAC), Medium-Sized Cities Mobility PAC, Large Cities Mobility PAC, Pavement and Road Improvement PAC and the Transportation and Urban Mobility Infrastructure Program, in addition to lines of funding from The Brazilian Development Bank (BNDES) related to urban mobility. It is also worth mentioning that the funding sources for the programs are heterogeneous. In various cases, the same project receives voluntary transfers of federal resources provided for by the federal Annual Budget Law as well as financing agreements signed with BNDES and Caixa Econômica Federal (cf. Ruling 2130/2016-TCU-Plenary).

In the case of programs that use federal resources – namely, the Large Cities Mobility PAC – Semob is responsible for selecting projects eligible to receive federal funding. After this selection, the federative entities need to start the process to sign the respective Agreement with Caixa Econômica Federal (Caixa), who is the official financial institution of the federal government for these arrangements, as per Ministry of Cities Ordinance No. 164, of 12 April 2013. At the federal level, Caixa is also responsible

for the technical analyses of the basic design and project budget.

The tender process for public works should only be initiated after Caixa approves the project, in accordance with Ruling 2099/2011-TCU-Plenary. As a rule, the technical analyses by Caixa require various revisions to the basic design, until the minimum conditions for approval are met. It is also important to mention that it is not uncommon for parliamentary amendments to be included in the Annual Budget Law to allocate federal resources to urban mobility projects, while it is examined by Congress. The Ministry of Cities classifies these projects as "Non-PAC Amendments".

In view of the above, concerning the effectiveness of federal investments in urban mobility projects, it is worth noting that data recently collected by the TCU, published in Ruling 2327/2015-TCU-Plenary, concerning the execution of these programs in 2015, show the following situation:

- From 378 urban mobility projects under the Mobility PAC, 55 are either paralyzed or delayed. In relation to the Pavement PAC, the number of delayed or paralyzed projects is 152 out of 1,043. As far as "Non-PAC Amendments" projects, the total in this situation is 235 out of a total of 1,102;
- The percentage of urban mobility projects funded with federal resources that are either delayed or paralyzed in relation to the total number of planned projects, in each program, is:
  - » Mobility PAC – 14.74%;
  - » Pavement PAC – 14.57%;
  - » Non-PAC Amendments – 21.32%; (BRAZIL, 2015d)

In addition, given the large number of projects not yet started, the TCU also calculated the proportion of delayed or paralyzed projects in relation to the number of started projects, in order to obtain a more reliable metric regarding the degree of efficiency of allocation of federal resources in urban mobility projects. The findings were as follows:

- The percentage of urban mobility projects funded with federal resources that are either delayed

or paralyzed in relation to the total number of projects started, in each program, is:

- » Mobility PAC – 47.82%;
- » Pavement PAC – 45.10%;
- » Non-PAC Amendments – 27.26%; (BRAZIL, 2015d).

The Federal Court of Accounts made some qualifications regarding the origin of the data, which is the responsibility of the Ministry of Cities and was not validated by the TCU. The data related to "Non-PAC Amendments" had gaps in relation to the status of the project in 34.39% of the records, which affects the percentages informed of stages of the projects in this program.

Finally, the TCU gave important information that "funding for the Pavement PAC does not come from the Federal Government Budget, but from the Transportation and Urban Mobility Infrastructure Program (Pró-Transporte), that receives contributions from the Severance Pay Indemnity Fund (FGTS)" (BRAZIL, 2015d).

The amount of resources involved in these programs is substantial. The TCU Ruling shows a forecast of federal investments of BRL 27.9 billion in the Mobility PAC. The funds allocated to the

Pavement PAC total around BRL 9.8 billion and in the Non-PAC, through legislative amendments, approximately BRL 15.8 billion.

Based on the data collected by the TCU, it is possible to see that, although major investments were planned for urban mobility projects, until 2015 execution of these projects was slow, with a large number of public works either paralyzed or delayed.

Combined with recent increase in demand for public transportation in certain cities around the country, this scenario further increases the pressure on existing urban mobility infrastructure.

Finally, aiming at an eventual acceleration in the execution of urban mobility projects, an important model that has been applied for execution and operation of urban mobility projects is the public-private partnership. This is a system created by Law No. 11079, of 30 December 2004. Since urban public transportation is a municipal or district mandate, the municipalities or Federal District, as a rule, are the public partners in such contractual relationships.

Notwithstanding, in Ordinance No. 262/2013, the Ministry of Cities issued rules and procedures for transferring funds from the Federal Government Budget to projects delegated to the private sector through public-private partnerships (PPP) selected in the Large Cities Mobility PAC 2.



#### 4. BACKGROUND OF THE WORK OF THE TCU IN RELATION TO BRAZILIAN URBAN MOBILITY

Given the major relevance of this theme, the Federal Court of Accounts can contribute to and indicate possible improvements to public policies involving this issue.

Historically, TCU's involvement was greater regarding the regularity of the execution of urban mobility projects, within the scope of the TCU annual public works audits cycles, known as Fiscobras.

TCU audited various public work projects when monitoring the major expansion in the execution of projects, especially subways, in the late 1990s. Among them we highlight i) Brasília/DF Subway – Decision 469/1997-TCU-Plenary and 1265/2002-TCU-Plenary; ii) Belo Horizonte/MG Subway System – Calafate-Barreiro stretch – Decision 956/1999-TCU-Plenary and 1334/2002-TCU-Plenary; iii) Natal/RN Subway System – Decision 432/2001-TCU-Plenary, 840/2002-TCU-Plenary and Ruling 852/2003-TCU-Plenary; iv) Porto Alegre/RS Subway System – Assis Brasil-Centro-Azenha stretch – Decision 600/2001-TCU-Plenary; and v) Recife/PE Urban Train System – Decision 930/2001-TCU-Plenary and 978/2001-TCU-Plenary.

A significant portion of these oversight actions consisted of audits within the scope of Fiscobras – an annual cycle of audits of public works performed by the TCU, in compliance with the budgetary guideline laws (LDO) for each fiscal year. These laws require this Court of Accounts to send a consolidated report on the audits of public projects to the National Congress every year.

In view of this, many of the aforementioned audits, despite constituting an important effort to identify, prevent and correct serious irregularities, consist of individual audits per project, without allowing for a more overall view of the efficiency and effectiveness of federal resources invested in urban mobility projects.

Later, as a result of enhanced budget and public project analysis methodologies used since Fiscobras 2005, TCU carried out audits of certain subway projects considered symbolic due to the size and seriousness of the irregularities that were found. Some examples are: i) Salvador/BA Subway System – Lapa-Pirajá stretch – Rulings 1453/2006, 2065/2006,



2369/2006 and 2873/2008, all from the Court Plenary; and ii) Fortaleza/CE Subway System – South Line – Rulings 1444/2006, 3070/2008, 386/2009 and 2450/2009, all from the Court Plenary. In both cases, the TCU detected a variety of irregularities, particularly:

- absence of a budget spreadsheet for the basic and/or executive design, in violation of Article 7, § 2, Subsection II, of Law 8666/1993 and Article 6, Subsection IX, of the same law;
- serious irregularities in the tender process, such as the unjustified absence of dividing the object (pursuant to Article 23, § 1 of Law 8666/1993), absence in the tender invitation of acceptability criteria for unit prices in proposals by bidders and awarding of the contract to the company that received second place in the competition without respecting the conditions of the winning bid;
- payment for services not stipulated in the contract and/or not executed, including maintenance of the construction site at a fixed monthly amount in situations where the project was either paralyzed or proceeding slowly;

- improper signing of contractual amendments, due to the system for execution of the contracts being lump sum contracts, that, *a priori*, restrict the hypotheses of amendments to the contract;
- deficient design project;
- exceeding the legal limits for signing contractual amendments and/or absence of the formalization of these amendments; and
- over-invoicing resulting from excessive prices, compared to market prices, inappropriate quantities, excessive costs without breakdowns in regard to construction site maintenance or local administration.

In light of these irregularities, the TCU considered these cases of over-invoicing to be a misappropriation of public funds, corresponding to approximately BRL 50.5 million (historical values – base date of 1999). This amount referred to the public works of the Salvador/BA Subway. The amount for construction of the South Line of the Fortaleza/CE Subway was around BRL 51.3 million (historical values – base date of November 1997).

Both projects received federal funding through agreements signed between the *Companhia Brasileira de Trens Urbanos* (CBTU) and the City Hall of Salvador/BA (in the case of the Salvador Subway) and the state of Ceará (in the case of the Fortaleza Subway).

For these reasons, the Court carried out special rendering of accounts (TCE) to determine the amount of debt and identify those accountable. The merits of both cases have not yet been judged.

Therefore, we verify that TCU's work regarding this important topic needed improvement, in order to provide more input to improve Public Administration in this matter, primarily considering the risks identified in the execution of the aforementioned projects.

That is why a technical unit specialized in urban infrastructure was created within the Secretariat of the Court – the Department of External Control - Urban Infrastructure (SeinfraUrbana), whose responsibilities range from continuing the

mentioned audits of public works projects within the scope of Fiscobras to more complex and structuring types of work, as we will see below.

## 5. CONTRIBUTIONS OF TCU AUDITS – NATIONAL URBAN MOBILITY POLICY

Urban mobility is the topic of various audits carried out by the TCU. Apart from the previously mentioned rulings, another worth noting is Ruling 2430/2015-TCU-Plenary.

This decision judged a performance audit whose goal was to assess governance aspects of the National Urban Mobility Policy at the federal level. The main criterion used was the "Framework to Assess Governance in Public Policies" published by the TCU through Ordinance-TCU 230, of 25 August 2014.

In this study, the concept of governance adopted was "the ability of governments to conceive, formulate and implement policies and carry out their duties. This concept also includes the capacity for interaction between various players, to express their interests and ensure transparency in the accountability of government performance" (BRAZIL, 2015e).

The components of governance evaluated in this ruling were: i) Institutionalization; ii) Plans and objectives; and iii) Coordination and consistency.

The "institutionalization" component refers to formal or informal aspects of the existence of the policy, related to organizational capacities, regulations, standards, procedures, jurisdictions and resources that enable the objectives and results of the public policy to be achieved" (BRAZIL, 2015e). It is expected that a public policy be legally and officially formalized, with defined rules, standards and procedures regarding decision-making bodies, mandates and duties of each agent involved.

In turn, the "Plans and objectives" component involves the definition of goals and objectives to be able to assess the relevance of the actions carried out and the expected results of the policy.

The "Coordination and consistency" component seeks to determine whether the public organizations act in a coordinated and concerted manner, to achieve set goals, or if they are acting in a scattered way, with overlapping of actions and efforts whose results may be contradictory.



The situation detected by the TCU in this paper revealed the following audit findings: i) Goals and indicators adopted are unable to assess and measure the progress and achievement of the National Urban Mobility Policy objectives; ii) Objectives and guidelines of the policy are not being clearly considered as selection criteria for the proposals of urban mobility projects submitted by federative entities to obtain federal resources; iii) Cooperative effort between spheres of government is insufficient for adequate implementation of the policy; and iv) "The actions of the Federal Government are not aligned in a way to prioritize non-motorized modes of transportation over motorized, as well as collective public transportation services over motorized individual transport" (BRAZIL, 2015e).

In light of the situation detected, various recommendations were made to the bodies involved, especially the Ministry of Cities, in order to mitigate these weaknesses and risks and for the National Urban Mobility Policy to adequately achieve its objectives. In other words, various improvement opportunities were identified which, if implemented, could make the Federal Government's performance more effective for the benefit of society.

Among the main recommendations, the following are worthy of note:

- adopt measures aimed at defining performance goals and indicators that enable measuring

if, and to what extent, the desired results of the National Urban Mobility Policy are being achieved;

- improve the procedures for assessing and selecting urban mobility projects that will receive federal funding, to make explicit the reasons that permit selection of the proposal-object of analysis in relation to the objectives and guidelines of the National Urban Mobility Policy;
- establish mechanisms for coordination, communication and collaboration with other federative entities and stakeholders in the National Urban Mobility Policy that enable alignment of strategies and actions; and
- institute mechanisms that mitigate possible non-alignments between the public urban mobility policy and other policies.

## 6. CONTRIBUTIONS MADE BY TCU AUDITS – RECENT PUBLIC WORKS AUDITS

In addition to more structuring work, we continued with the audits of public works focused on urban mobility enterprises, since the materiality, relevance and risks involved in a significant number of projects for subways, light rail vehicle (LRV), bus

rapid transit (BRT), bus lanes and other modes, are high.

As of Fiscobras 2014, more urban mobility-related projects have been audited, involving not only subway systems, but also especially bus lanes.

One of the reasons for this is the increased investments in this type of urban mobility project. It is worth noting that data contained in Ruling 2327/2015-TCU-Plenary shows that around 70% of total federal resources for urban mobility projects are earmarked for investments to design, build or expand bus lanes and similar projects.

In 2014, according to Ruling 2981/2014-TCU-Plenary, there were audits of the following projects: i) allegations regarding possible irregularities in the tender for the North-South BRT bus lane in Goiânia/GO – TC 010.585/2014-1; ii) Salvador Subway – Line 1 – Lapa-Pirajá; and iii) Fortaleza Subway – South Line. The scope of the last two audits was to verify the completeness and regularity of the guarantees offered by the companies hired to carry out the projects, in accordance with decisions issued by the TCU in earlier audits.

In 2015, according to Ruling 2805/2015-TCU-Plenary, 10 urban mobility projects were inspected: i) Radial Leste bus lane – stretch 1; ii) Radial Leste bus lane – stretch 3; iii) Itaim Paulista – São Mateus perimeter BRT bus lane and São Mateus bus terminal; iv) M'Boi Mirim-Cachoeirinha bus lane;

v) East Line of the Fortaleza/CE Subway; vi) West Line of the Fortaleza/CE Subway; vii) South Line of the Fortaleza/CE Subway; viii) Fortaleza/CE BRT – express beltway; ix) expansion and modernization of the Federal District Subway; and x) BRT – Federal District – West. The first four projects are located in São Paulo/SP.

While some of the abovementioned projects (M'Boi Mirim-Cachoeirinha bus lane, West Line of the Fortaleza/CE Subway, Fortaleza/CE BRT – express beltway, expansion and modernization of the Federal District Subway and BRT – Federal District – West) were in the initial stages, with no formalized bidding process. The contract for others had already been signed, but were proceeding at an extremely slow pace in terms of execution. Two of them were paralyzed (Radial Leste bus lane – stretch 1 and East Line of the Fortaleza/CE Subway) and two projects were in the bidding process at the time the audits were carried out (Radial Leste bus lane – stretch 3 and Itaim Paulista-São Mateus perimeter BRT).

A significant number of serious irregularities were detected in the projects. In at least three of them – Radial Leste bus lane – stretch 1, Radial Leste bus lane – stretch 3 and Itaim Paulista-São Mateus perimeter BRT – we proposed paralyzing the services due to findings related to overpricing and irregularities in the tender process. Some of the irregularities were serious and there was a the recommendation to stop





services (IG-P), in accordance with Article 112, § 1, Subsection IV, of LDO 2015 – Law 13080/2015, without prejudice to issuing an injunction to suspend the competition., in the case of projects in the tender stage.

In fact, in the Radial Leste bus lane – stretch 1, as shown in Ruling 1923/2016-TCU-Plenary, the percentage of overpricing detected was 20.93% in the sample studied and 10.58% in relation to the total price of the project. Furthermore, in that specific case, a prequalification procedure for the project was carried out simultaneously with 15 other projects, containing an express clause stating that a bidder could only win one of the future competitions. It should be noted that the competitions subsequent to those prequalifications did not occur on the same date, which could lead to market division because a winning bidder in a prior competition would already know in advance that it would not be able to win in a subsequent competition. This is undoubtedly an irregular bidding procedure, as evidenced by the judgment on the merits of the case.

In the case of the Radial Leste bus lanes – stretch 3 (Ruling 111/2016-TCU-Plenary) and Itaim Paulista-São Mateus perimeter BRT (Ruling 358/2016-TCU-Plenary), the percentage of overpricing was 16.43% and 15.68%, respectively, in the sample examined.

In 2016, we conducted audits of a wider geographic range covering the following projects: i) river transportation system in Recife/PE; ii) East Line

of the Fortaleza/CE Subway; iii) Salvador/BA Subway – Lines 1 and 2; iv) Teresina/PI LRT (light rail transit); v) Salvador/BA BRT – Av. Pinto de Aguiar-Gal Costa and Av. Orlando Gomes; vi) Goiânia/GO North-South BRT; vii) BRT for the metropolitan region of Recife/PE; viii) Palmas/TO South BRT; ix) Senador Fernandes Távora/Expedicionários BRT in Fortaleza/CE; x) Campo Grande-Ouro Verde BRT and Perimetral VI in Campinas/SP; xi) Radial Leste bus lane – stretch 1 – São Paulo/SP; and xii) BRT Centro Cohab BRT – new beltway – stretch 1 – São Luís/MA.

The public work project where we detected the most serious irregularities was the Palmas/TO South BRT. This project was in the bidding stage and, according to the decision by the rapporteur of the case (BRASIL, 2016g), the technical and economic feasibility studies contained gaps and shortcomings. Thus, it was not possible to assess whether the project is feasible or not. Other evidence of irregularities found involved shortcomings in the preliminary engineering design and the justifications for choosing the integrated public procurement regime. Considering that the project was still in the bidding stages, the rapporteur, endorsed by the Plenary of the TCU, decided to issue an injunction to suspend the competition, in addition to notifying the National Congress about the occurrence of the IG-P, pursuant to Article 117, § 1, Subsection IV, of LDO 2016 – Law No. 13242/2015. The case was recently judged resulting in Ruling 460/2017-TCU-Plenary, in

which evidence of the aforementioned irregularities was confirmed.

## 7. DISCUSSION OF POSSIBLE NEW AUDITS AND FORMS OF APPROACH

The situation exposed by the audits of public works under Fiscobras 2015 and 2016 shows that many problems identified since 2005 in urban mobility projects persist, such as deficient basic designs, overpricing and restrictive tender processes, etc.

Due to the materiality, relevance and risk of these enterprises, it is extremely important that the internal controls of the entities responsible for allocating federal resources in these cases – the Ministry of Cities and Caixa Econômica Federal, acting as representatives of the Federal Government – be well designed and developed. This is especially important when it comes to their respective technical engineering staffs, addressing the main risks related to the project and their budgets.

With a qualified technical staff and a well-designed internal control structure, many of the risks uncovered by these TCU audits would be mitigated and it is possible that the persistent occurrence of serious irregularities would be avoided, which could make the actions of the Federal Government more effective in supporting the execution of these projects.

Therefore, to combat the recurrence of serious irregularities identified in the projects, it is suggested that the TCU verify and assess the internal control structure set up in these two entities – Ministry of Cities and Caixa. It is worth pointing out that the TCU also noted the importance of a study on this issue, as shown in Subsection 9.2 of Ruling 1737/2015-TCU-First Court.

## 8. CONCLUSION

In light of the above, it is clear that urban mobility is highly important for the Brazilian population. In this regard, it is the responsibility of the TCU, in its institutional mission to help improve Public Administration in benefit of society, to provide input and proposals that can enhance the state's performance in this area.

It was found that, in the past, the TCU largely focused its oversight actions on audits of specific urban mobility projects. At that time, we noted se-

rious irregularities in most of the audits performed, which indicated a scenario of serious risks for the Public Administration.

Recently, in an effort to make more contributions that are more comprehensive, the Federal Court of Accounts has sought to carry out work that is more structuring and would highlight any weaknesses or improvement opportunities in the execution of the National Urban Mobility Policy. Following are some of the main recommendations made to the Ministry of Cities:

- adopt measures to define adequate and reliable performance goals and indicators; and
- improve the procedures for assessing and selecting urban mobility projects that will receive federal funding, in order to specify the reasons that for selection of the proposal-object under analysis in relation to the objectives and guidelines of the National Urban Mobility Policy.

As of Fiscobras 2014, more urban mobility-related projects have been audited, involving not only subway systems, but also especially bus lanes.

In addition, data contained in Ruling 2327/2015-TCU-Plenary shows that around 70%





of total federal resources for urban mobility projects are earmarked for investments to prepare designs, build or expand bus lanes and similar projects.

In this regard, recent audits of urban mobility projects by the TCU have revealed a situation of high risk concerning achieving the objectives for federal investments in the sector. Serious irregularities were noted in various cases, particularly overpricing, deficient basic designs and irregularities in tender procedures.

In some cases, the severity of the problems resulted in a recommendation to the National Congress to paralyze the public works, along with injunctions to suspend tender procedures.

Finally, a possible new approach to audits by the Court of Accounts was suggested aiming to assess internal controls designed to achieve the desired objectives for federal investments in the sector, in order to mitigate risks and prevent the occurrence of the persistent irregularities detected in TCU audits. As seen, this is a form of action seconded by the Federal Court of Accounts through Ruling 1737/2015-TCU-First Court.

## NOTES

- 1 The principles underlying the National Urban Mobility Policy are found in Article 5 of Law No. 12587/2012.
- 2 The guidelines of this policy are contained in Article 6 of Law No. 12587/2012.

3. The objectives, in turn, are stated in Article 7 of Law No. 12587/2012.

## REFERENCES

BRAZILIAN ASSOCIATION OF TECHNICAL STANDARDS. NBR 15570: technical specifications for the manufacture of vehicles with urban characteristics for public transportation of passengers. Rio de Janeiro: ABNT, 20 Mar. 2009. 19 p.

BARBOSA, B. Alívio na lotação do Metrô e CPTM deve ficar para 2017 (Ridership relief on the Subway and CPTM should occur in 2017). UOL, São Paulo, SP, 2016, p. 1-16, 11 January 2016. Available at: <<https://goo.gl/P8oTmW>>. Accessed on: 26 October 2016.

BRAZIL. Federal Constitution, of 5 October 1988. Text consolidated up until Constitutional Amendment No. 93, of 8 September 2016a. Brasília, DF, 5 October 1988. Available at: <<https://goo.gl/ZuK7ON>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Brazilian Institute of Geography and Statistics. Synopsis of the Demographic Census 2010. Rio de Janeiro, RJ, 2011. Available at: <<https://goo.gl/XwWJ4H>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Law No. 10683, of 28 May 2003. Provides for the organization of the Presidency of the Republic and Ministries, in addition to other provisions. Federal Official Gazette, Brasília, DF, 29 May 2003. Available at: <<https://goo.gl/BW6wDI>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Law No. 11079, of 30 December 2004. Institutes general rules for public-private partnership bidding and contracting within the realm of the public administration. Federal Official Gazette, Brasília, DF, 31 December 2004. Available at: <<https://goo.gl/fQqGGB>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Law No. 12587, of 3 January 2012. Institutes guidelines for the National Urban Mobility Policy; revokes provisions from Decree Laws No. 3326, of 3 June 1941, and 5405, of 13 April 1943, as well as the Labor Law Consolidation (CLT), approved by Decree Law No. 5452, of 1 May 1943, and Laws No. 5917, of 10 September 1973, and 6261, of 14 November 1975; in addition to other provisions. Federal Official Gazette, Brasília, DF, 4 January 2012. Available at: <<https://goo.gl/LEvQd>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Law No. 13080, of 2 January 2015a. Provides guidelines for elaboration and execution of the Budget Law of 2015, in addition to other provisions. Federal Official Gazette, Brasília, DF, 2 January 2015. Extra edition. Available at: <<https://goo.gl/vkEBj2>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Law No. 13242, of 30 December 2015b. Provides guidelines for elaboration and execution of the Budget Law of 2016, in addition to other provisions. Federal Official Gazette, Brasília, DF, 31 December 2015. Extra edition. Available at: <<https://goo.gl/AfcXhA>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Law No. 13341, of 29 September 2016b. Amends Laws No. 10683, of 28 May 2003, that provides for the organization of the Presidency of the Republic and Ministries, and 11890, of 24 December 2008, and revokes Provisional Measure No. 717, of 16 March 2016. Federal Official Gazette, Brasília, DF, 30 September 2016. Available at: <<https://goo.gl/X8rUQ6>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Ministry of the Cities. Ministry of the Cities Ordinance No. 164, of 12 April 2013. Federal Official Gazette, Brasília, DF, Year 150, No. 71. 15 April 2013. Section 1, p. 101.

\_\_\_\_\_. Ministry of the Cities. Ministry of the Cities Ordinance No. 262, of 7 June 2013. Federal Official Gazette, Brasília, DF, Year 150, No. 109. 10 June 2013. Section 1, p. 56.

\_\_\_\_\_. City Hall of São Paulo/SP. Public Transportation absorbs 80% more passengers in the last decade. Informes Urbanos, São Paulo, 2012, No. 11, p. 1-5, Aug. 2012. Available at: <<https://goo.gl/xXHR0n>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 111/2016c. Plenary. Rapporteur: Minister Bruno Dantas. Session of 27 January 2016. Available at: <<https://goo.gl/iikCPT>>. Accessed on: 31 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 358/2016d. Plenary. Rapporteur: Minister Bruno Dantas. Session of 24 Feb 2016. Available at: <<https://goo.gl/K6FmP7>>. Accessed on: 31 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 386/2009. Plenary. Rapporteur: Minister Aroldo Cedraz. Session of 11 Mar 2009. Available at: <<https://goo.gl/DuhrTe>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 460/2017. Plenary. Rapporteur: Deputy Minister André Luís de Carvalho. Session of 15 Mar 2017. Available at: <<https://goo.gl/cZxtmz>>. Accessed on: 21 April 2017.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 852/2003. Plenary. Rapporteur: Minister Lincoln Magalhães da Rocha. Session of 9 July 2003. Available at: <<https://goo.gl/QngEaA>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 1444/2006. Plenary. Rapporteur: Minister Guilherme Palmeira. Session of 16 August 2006. Available at: <<https://goo.gl/URsDqo>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 1453/2006. Plenary. Rapporteur: Deputy Minister Augusto Sherman Cavalcanti. Session of 16 August 2006. Available at: <<https://goo.gl/wpFokg>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 1737/2015c. First Court. Rapporteur: Deputy Minister Weder de Oliveira. Session of 24 March 2015. Available at: <<https://goo.gl/R9N6Dv>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 1923/2016e. Plenary. Rapporteur: Minister Bruno Dantas. Session of 27 July 2016. Available at: <<https://goo.gl/z1aYHw>>. Accessed on: 31 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2065/2006. Plenary. Rapporteur: Deputy Minister Marcos Bemquerer Costa. Session of 16 August 2006. Available at: <<https://goo.gl/5TQwSw>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2099/2011. Plenary. Rapporteur: Deputy Minister Marcos Bemquerer Costa. Session of 10 August 2011. Available at: <<https://goo.gl/J7hRrc>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2130/2016f. Plenary. Rapporteur: Deputy Minister Marcos Bemquerer Costa. Session of 17 August 2016. Available at: <<https://goo.gl/H8QUvu>>. Accessed on: 23 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2327/2015d. Plenary. Rapporteur: Deputy Minister Augusto Sherman Cavalcanti. Session of 16 September 2006. Available at: <<https://goo.gl/TuPqgU>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2,369/2006. Plenary. Rapporteur: Deputy Minister Augusto Sherman Cavalcanti. Session of 6 December 2006. Available at: <<https://goo.gl/Qzz0ED>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2430/2015e. Plenary. Rapporteur: Minister Augusto Nardes. Session of 30 September 2015. Available at: <<https://goo.gl/sAUMAS>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2,450/2009. Plenary. Rapporteur: Minister Aroldo Cedraz. Session of 21 October 2009. Available at: <<https://goo.gl/0fw69x>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2805/2015f. Plenary. Rapporteur: Minister Walton Alencar Rodrigues. Session of 4 November 2015. Available at: <<https://goo.gl/F8O7u1>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2873/2008. Plenary. Rapporteur: Deputy Minister Augusto Sherman Cavalcanti. Session of 3 December 2008. Available at: <<https://goo.gl/gRoLHj>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 2,981/2014. Plenary. Rapporteur: Minister Bruno Dantas. Session of 5 November 2014. Available at: <<https://goo.gl/RwHEeT>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Ruling No. 3,070/2008. Plenary. Rapporteur: Minister Aroldo Cedraz. Session of 10 December 2008. Available at: <<https://goo.gl/1j379w>>. Accessed on: 28 October 2016.

\_\_\_\_\_. Federal Court of Accounts Communication of precautionary measure to the full body of the TCU. Plenary. Rapporteur: Deputy Minister André Luís de Carvalho. Session of 21 September 2016 – Minutes 36/2016g. Federal Official Gazette, Brasília, DF, 30 September 2016. p. 97-98. Available at: <<https://goo.gl/Esavf0>>. Accessed on: 31 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 432/2001. Plenary. Rapporteur: Minister Marcos Vinícios Vilaça. Session of 11 July 2001. Available at: <<https://goo.gl/ACxjfO>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 469/1997. Plenary. Rapporteur: Minister Paulo Affonso Martins de Oliveira. Session of 6 August 1997. Available at: <<https://goo.gl/5OHiQL>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 600/2001. Plenary. Rapporteur: Minister Marcos Vinícios Vilaça. Session of 22 August 2001. Available at: <<https://goo.gl/i089Hf>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 840/2002. Plenary. Rapporteur: Minister Lincoln Magalhães da Rocha. Session of 10 July 2002. Available at: <<https://goo.gl/vtBDkl>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 930/2001. Plenary. Rapporteur: Minister Valmir Campelo. Session of 7 November 2001. Available at: <<https://goo.gl/ksiiY>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 956/1999. Plenary. Rapporteur: Minister Humberto Souto. Session of 15 December 1999. Available at: <<https://goo.gl/VBUoLY>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 978/2001. Plenary. Rapporteur: Minister Valmir Campelo. Session of 21 November 2001. Available at: <<https://goo.gl/lK8lRT>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 1,265/2002. Plenary. Rapporteur: Minister Adylson Motta. Session of 25 September 2002. Available at: <<https://goo.gl/WgBbUb>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Decision No. 1,334/2002. Plenary. Rapporteur: Minister Marcos Vinícios Vilaça. Session of 9 October 2002. Available at: <<https://goo.gl/9xHg9r>>. Accessed on: 26 October 2016.

\_\_\_\_\_. Federal Court of Accounts Strategic Map TCU 2015-2021. Available at: <<https://goo.gl/SBij3T>>. Accessed on: 23 October 2016.