

Design of a Civic Culture Model of the Strategic System of Public Transportation (SETP) for the Inhabitants of the Commune One in the City of Neiva

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Abstract

The strategic system of public transport that is being implemented in the city of Neiva will carry out infrastructure changes in the city, improve mobility, and contribute to the strengthening of civic culture. The inhabitants of the Commune One of the city of Neiva are the target population of the research. In order to characterize the population currently using the city's public transport system and identify the needs and behavior, the application of an instrument for collecting information (survey) is used.

The model of civic culture will enable the inhabitants of the Commune One improve and strengthen their behavior citizen by applying different types of strategies, taking into account that culture is a dynamic process that requires time to achieve the awareness of the commune and work in welfare and the reduction of accidents, as well as ensure results in generations to come.

Keywords: Logistic, Perception, culture citizen, communication, mobility, awareness-raising and motivation

1. Introduction

2013 document CONPES 3756 set systems of public mass transportation in Colombia, these have been improved and a law in the culture of the big cities of the country, likewise the National Planning Department set reorder the public transport in medium-sized cities through the implementation of strategic SETP public transportation systems.

The strategic system of public transportation (SETP) is a service of transport integrated and accessible to the population, whose operation is planned, managed, and controlled through the system of management and control of fleet by the transportation authority or by who is delegated and structured based on the results of the technical studies developed by each territorial entity and validated by the nation through the National Department of planning DNP (Decree 3422, article 2, 2009) [1].

These systems are implemented in medium-sized cities with populations between 250,000 and 600,000 inhabitants in order, reduce the number and time of travel, thus improving the mobility of the city, in the country already there are cities in the process of implementation of the SETP such Pasto, Popayán, Armenia, Montería, Sincelejo, Valledupar, Santa Martha, and at this time in the city of Neiva, at the same time there are other cities in the process of structuring such as Buenaventura, Ibagué, Manizales and Villavicencio (**National Department of planning, 2013**). [2] TRANSMILENIO in Bogotá was the first in the country and achieving order public transport, obtaining great physical changes such as the new infrastructure of the city, social changes allowing residents to have greater access to the system and acquiring it anywhere in the city and changes in the civic culture, allowing each inhabitant to form is as a social person. (National Department of planning, 1998)

The National Department of planning DNP, declares the importance of strategic public transport system project in the city of Neiva (National Department of planning, 2013), intermediate considered municipality with 330.487 inhabitants (Department National administrative statistics).

The implementation of the SETP along with the territorial reorganization which will take the city, will directly impact the civic culture, since the system establishes major physical changes in urban infrastructure such as bus stops, exchangers, buses with high technology, which requires a change in behavior of citizens.

Materials and Methods

A. Measuring Instrument

Applied data collection instrument was a survey, designed to take account of behaviors and perceptions that it wanted to identify the inhabitants of the Commune

One of the city of Neiva, are taken as references for design questions in other similar studies such as a survey conducted in the city of Cali, which sought to explore the perception of the students of the Universidad Autónoma de Occidente on the impact of culture citizen with the implementation and commissioning of the SITM - MIO (Duran, 2012), also a survey that allowed the collection of data for the identification of strengths and weaknesses of the State of culture in specific populations in the country (Corpo visionary). Duran, L. F. (2012). [3]

The survey was applied to 167 people of the Commune One of the city of Neiva in the year 2014, with the application of this measuring instrument managed to identify behaviors, attitudes and was projected possible cultural changes that the inhabitants will be of the commune with the implementation of the strategic system of public transportation (SETP) in the city.

Investigation Results

The investigation analyzes the surveys questions from the descriptive statistics as the measures of central tendency and the dispersion of the data to manage to construct a description type of the citizens of the Commune One.

Commune one of Neiva Type of the Citizen

According to the field work carried out by the researchers, analyzing the information provided and found, it is evident that the typical citizen of the Commune One of the city of Neiva, is a woman between 18 and 24 years old, employed, with a higher level of education, which currently uses the public transport -bus- of the city and would use the New Strategic Public Transport System.

On the other hand is aware of the existence of some traffic regulations for pedestrians such as respect the pedestrian traffic light and cross the streets through the demarcated areas, also believes that it is to regulate the current public transport service, bus technology is bad, the comfort is regular, the routes are good, people don't give their places to the expectant mothers and to the elderly, also considers that the drivers of public transport vehicles don't respect the traffic regulations nor do they passengers and drivers also put the lives of the users of the system in danger because they don't respect the traffic rules and pick up and leave passengers in places not established to do so, therefore would use the SETP for the convenience, for the buses, for the short time of travel and for good service. National Department of Planning. (s.f.) Retrieved on August 05, 2014.

In this order of ideas the typical citizen disagrees that a person doesn't cross through the demarcated areas and cross anywhere just to be in a hurry and is in total disagreement that a person doesn't cross the footbridge because is afraid of

heights, at the same time believes that very few pedestrians respect the traffic light, use footbridges and cross the demarcated areas, also says that has never attended to talks and training on civic culture and would like and assist if there were.

The typical citizen is willing to contribute to the improvement of citizen habits and culture with the implementation of the SETP, taking care of the physical resource of the system and contributing to its cleanliness, not throwing away garbage, and also thinks that the implementation of the SETP will help the city of Neiva improving the behavior of citizens and the image of the city.

2. Model of Citizen Culture for the Community One of the City of Neiva

This model of citizen culture consists of two important parts; the structural elements that the cultural model will have and the cultural impacts that the implementation will bring.

Following, the structural elements for the planning and execution of the citizen culture model are described for the Commune One of the city of Neiva, for the implementation of the Strategic Public Service System (SETP). Four fundamental types have been discriminated. National Department of Planning. (August 02, 2013).

- a) Diagnosis
- b) Citizen communication.
- c) Citizen awareness
- d) Urban Pedagogy

For each one, a description is offered, its main objective is shown, the problem it seeks to solve, the responsible for carrying out the strategy, the indicators that measure its compliance and the activities that need to be carried out.

The model is structured as follows: Introduction, characterization of the population, graphic model of citizen culture and structural elements of the model of citizen culture.

Introduction

Currently, in many countries of the world people are concerned about developing citizen culture programs that help to improve the coexistence of the inhabitants, Latin American countries like Colombia is not the exception, also the city governments have been concerned to advance this type of programs, one of the most notable was the one that has been carried out in Bogotá since 1990, wherewith numerous changes have been verified in the citizen culture and urban infrastructure (See Figure 1).

For the development of this model, the "Practical Citizen Culture Guide" elaborated by Antanas Mockus, Paul Bramberg, Rocio Londoño, Claudia Penaranda, Carolina Castro, Efrain Sanchez carried out in March 2004 in the city of Bogotá, is taken as reference. This guide identifies the results of a successful practice which today is reflected in the city, since culture is a dynamic process that requires time for implementation and considerable time to achieve the citizen's awareness. Antanas Mockus, Paul Bramberg, Rocio Londoño, Claudia Peñaranda, Carolina Castro, Efraín Sánchez. (March 2004).

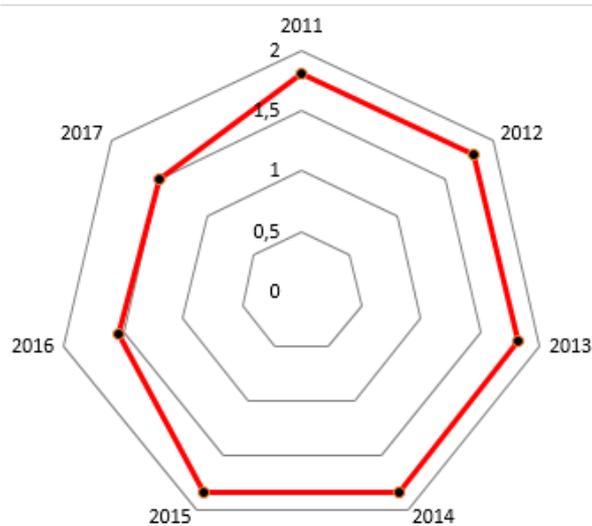


Figure 1. Passenger / kilometer index (PKI) for the entire city

Characterization of the Population of Community One

This characterization is supported by all the data collected through the survey that showed the following characteristics:

The inhabitants of the Community One are active users of the current public transport system, which have many disagreements with the service it provides, the poor state of the vehicle park is a great disadvantage because it doesn't provide comfort to the users, on the other hand, the contract of the bus drivers with people is not appropriate since verbal aggressions are frequently presented, in addition the places where they pick up and drop off passengers are not intended for that, also the safety of the users of the system is daily in danger for the constant violation of the traffic rules by the drivers of vehicles. Restrepo, J. A. (2014).

The lack of motivation of the users in relation of the transport influences in not contribute with the care of the physical resource of the system, reason why they throw garbage and cause damage to the vehicles, in addition the lack of knowledge on laws of the behavior inside the system of transport makes the users not to have the suitable cultural formation for example to yield positions to expectant

mothers, people of the third age and with disability, are intolerant to incidents that happen to other users.

In the Community one there are five traffic light intersections, which not all have their respective demarcation, pedestrians are not making use of them, drivers do not respect the traffic rules and a red light is not an impediment to move forward with the vehicle, also the commune counts with a footbridge on the street 1 and 2 with Avenue 26, which is not being used by the pedestrians evidencing that they cross under this risking their daily life without having necessity as evidenced in the Annex 9. Most of the inhabitants of the Community One Neiva have not been educated in civic culture, they say that they have never attended talks or lectures on proper behavior and traffic rules, that's why sometimes they commit infractions without knowing that they are doing, it should be pointed out that the interest shown by the inhabitants of the Community One for receiving information to improve their citizen behavior and compliance with traffic regulations.

Structural Elements of the Citizen Culture Model for Commune One of the City of Neiva

Diagnosis:

Data Collection

- **Description:** It is intended to identify and analyze the attitudes and behaviors of citizens in the use of the current public transport system and the traffic rules for pedestrians and drivers.
- **Goal:** Identify the main flaws in the behavior and coexistence of the citizens of the commune, to identify what kind of actions have to be carried out for the development and strengthening of the citizen culture with the implementation of the new Strategic Public Transport System. **Law 1503. (December 29, 2011). [8]**
- **Problem seeking to solve:** No information or reliable database to know the current state of the citizen culture and ignorance of the traffic regulations of the inhabitants of the Commune One of the city.
- **Activities:**
 - 1) Carry out direct observation work of citizens at the points of greatest flow of people in the commune, at the bus-stops and on public transport buses, to identify correct and incorrect actions and behavior of citizens.
 - 2) Design of the survey to collect the information that will be randomly made to the inhabitants of the commune about knowledge, attitudes and perceptions on issues of civic coexistence, knowledge and obedience of rules of coexistence and transit.

- 3) Application of measuring instruments.
- 4) Preparation of the diagnosis.
- 5) Establish the state of the art of citizen culture of the Inhabitants of the Commune One.

Placement of Video Cameras

Description: With the placement of video cameras in strategic points of the commune, in bus stops and buses of the new system, it is intended to constantly evaluate the attitudes and behaviors of the citizens in the streets and within the transport system (See Figure 2). The placement of the cameras also serves to keep track of compliance with traffic regulations for drivers and pedestrians and basic culture norms within the strategic transportation system. *Corpo Visionarios. (s.f.) Retrieved on November 15, 2014 [9].*

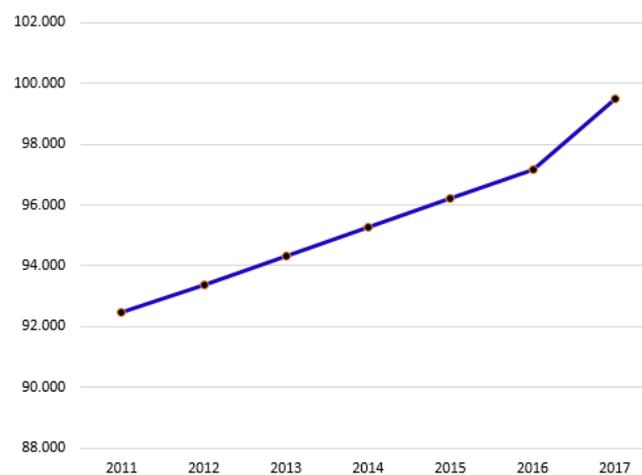


Figure 2. Number of passengers per day in Neiva

- **Goal:** Constantly evaluate the behavior of the inhabitants of the Commune One of the city of Neiva, through the placement of video cameras in the points of greatest flow of people, in the bus stops and public transport buses.
- **Problem seeking to solve:** Incorrect behavior of pedestrians and drivers and the violation of the rules.
- **Activities:**
 - 1) Identification of the points of greatest flow of people and vehicles, bus stops of the Commune One and buses with routes that transit through the commune.
 - 2) Placement of the cameras in the identified places.
 - 3) Identify citizens' behaviors by verifying compliance with and non-compliance with traffic regulations for pedestrians and drivers, as well as behavior within buses and their whereabouts.

Citizen Communication Information about SETP and Its Civic Culture Model

Description: This strategy is intended to inform the community about the new Strategic Public Transport System that is being implemented in the city so that they know how it will work. It is also intended to inform about the behavior that must be had inside and outside transport system since this project will not only benefit the users of this, but it will benefit the community in general. It will be carried out through advertising campaigns that achieve a positive impact on the public. **Definition ABC. (s.f.) Retrieved on November 12, 2014 [10]**

- **Goal:** Provide adequate information to the inhabitants of the commune about the functioning of SETP, the traffic regulations and the rules of coexistence for the use of the system, which contribute to the optimal functioning of the transport system through a set of mass advertising campaigns.

- **Problem seeking to solve:** Lack of information on the functioning of the SETP, the attitudes and incorrect behavior of citizens due to lack of knowledge of traffic rules and coexistence.

- **Activities:**

- 1) Create an image (logo, motto) that allows the identification of the model of civic culture generated for the Strategic Public Service System (SETP).

- 2) Develop an advertising campaign to inform the inhabitants of the commune about what is intended to be done with the implementation of the citizen culture model, so that they know about it and participate in the activities that are carried out.

- 3) Disseminate information through websites, broadcasters, local television channels, posters and billboards at strategic points (bus stops, banks, supermarkets, among others) that allow the community to be informed of the activities that will be carried out, the functioning and the proper behavior inside and outside the SETP. It is also important to be informed and aware of the main traffic regulations for drivers and pedestrians.

- 4) Create a portal, web page, blog or application that allows the constant flow of communication between the entity in charge and the citizen, where the community can share their good experiences with the implementation of the culture model as well as share their disagreements.

Rules of Civic Behavior for SETP

- **Description:** The aim is to elaborate a manual of regulations of civic coexistence that seeks to define a set of duties and rights for the citizens of the commune (See Figure 3). This manual will allow to identify, know and reflect on the suitable behavior within the SETP. Law 1503. (December 29, 2011). [11]

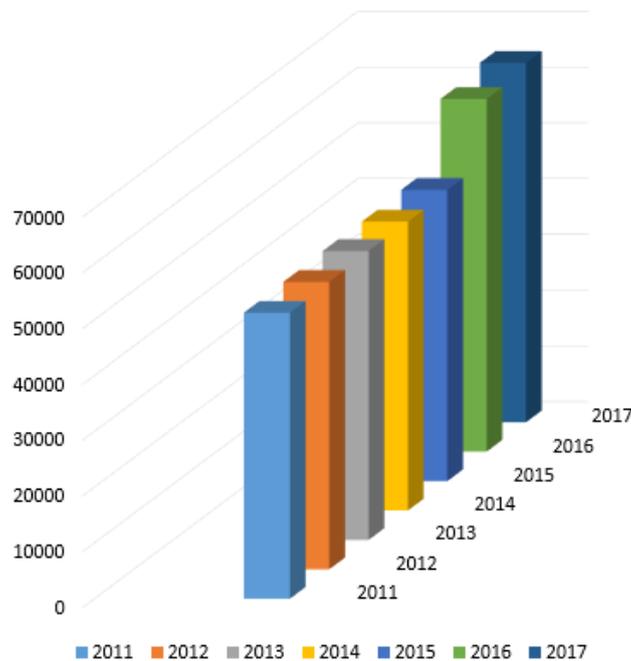


Figure 3. Number of kilometers per day in Neiva

- **Goal:** To elaborate a manual of civic coexistence rules that governs the behavior of the SETP users.
- **Problem seeking to solve:** Violence, conflicts and differences between SETP users, abuse of their own rights and disrespect for the rights of others as well as arbitrariness in the rules.
- **Activities:**
 - 1) Identification of the rules of coexistence that citizens must have inside and outside the SETP system.
 - 2) Create a manual including the rules of coexistence identified so that the commune knows the appropriate behavior within the SETP.
 - 3) Design a practical, didactic and playful booklet including the rules of coexistence previously established to be disseminated in schools aiming at training future citizens of the city.

Non-Verbal Language

Description: It is mainly based on generating symbols that are shown through palettes that represent different citizens' points of view of citizen's dealing with appropriate and inappropriate behaviors generated by other citizens. This way the auditory contamination and verbal aggressions that commonly occur between drivers will be reduced.

Goal: Design graphic communication symbols through palettes to reduce auditory contamination and verbal aggressions among the city's Commune One citizens.

- **Problem seeking to solve:** Verbal aggressions among drivers and auditory contamination.

- **Activities:**

- 1) Designing the symbols and their corresponding meanings.
- 2) Inform of the symbols and their meanings through media inputs (webpages, newspaper articles, billboards, radio advertisements).
- 3) Hand out the palettes to the commune so that they use the non-verbal language.

Civic Awareness

- **Description:** It is intended to grow awareness through campaigns and strengthen the citizens' sense of belonging towards the SETP, promoting a change of attitude and appropriate coexistence behavior. It is also intended to grow the commune's awareness on the compliance of traffic rules. *wordreference*. (s.f.). Retrieved from December 14, de 2014. [12]

- **Goal:** Improve citizens' coexistence relationships and promote compliance of traffic rules through street cultural and artistic activities at the Commune One of the city.

- **Problems seeking to solve:** Pedestrians' and traffic accident rates, road accidents, conflict among SETP users, non-compliance with traffic regulations.

- **Activities**

- 1) Carry out artistic performances to reinforce topics such as knowledge of traffic rules and appropriate behavior within the SETP.
- 2) Carry out cultural activities facing problems found from direct observation and the survey.
- 3) The above activities will also be carried out in schools to achieve awareness from children at the commune.
- 4) Encourage the people's commune to have a better sense of belonging of the SETP physical resources.

Urban Pedagogy

- **Description:** This strategy is intended to find information and establish a set of activities allowing citizens' training. **Colom, A. (1990).** [13]

- **Goal:** Generate learning and awareness among citizens to facilitate their cultural training through talks and training.

- **Problems seeking to solve:** Non-compliance of the traffic rules, lack of knowledge on coexistence regulations and traffic, and inappropriate use of SETP.

Activities

1) Conduct talks in schools, high schools and universities of the commune on basic coexistence and traffic rules for pedestrians and drivers (go into detail about and explain on the importance of using vehicular bridges, respect traffic lights and use of crosswalks). Also, inform on the SETP working and behavior to have within the system.

2) Establish pedagogical regulations that allow to inform, encourage and teach so that citizens gain enough knowledge and respect the coexistence and traffic rules established.

3) Plan activities offenders must carry out when breaking traffic rules (attendance to crash courses on regulations of coexistence, traffic and knowledge of the SETP working)

Expected Impacts on the Application of the Model

Improving Mobility, Coexistence and Security

On a daily basis, the inhabitants of the Commune One of the city of Neiva face with congestions in the mobility that generates the current vehicular flow since their main access routes are Carrera 1 and 2. Considering this, the application of these strategies will significantly improve the aforementioned aspects, the prioritization of lanes, the knowledge and the application of the established rules of coexistence and traffic allowing pedestrians to pass through the determined places, drivers of public transport to stop at authorized sites and not anywhere, drivers of taxis, motorcycles and private cars to respect the regulations established by traffic. Technical Team of the Territorial Arrangement Plan (POT), City Hall of Neiva. (s.f.) [14]

Reducing Accident Rates

As evidenced in the last report issued by the Secretary of Mobility of Neiva on accident rate in 2014, this year accident rates have increased by 20.4% compared to 2013 and 1,948 events related to traffic accidents such as damage, injuries and fatalities have occurred. Therefore, the implementation of this model of culture and the development of the proposed activities including sufficient knowledge and application of the rules aim to reduce these accident rates.

Reducing Aggressiveness Levels

Nonverbal communication allows to get rid of stress without uttering a word. The use of palettes and symbols will generate a less dense environment and decrease the rate of auditory contamination.

Increasing Tolerance Levels

Learning, knowing and applying the rules will allow disinformation rates to decrease in a notorious way, obtaining a positive flow of communication that allows the eradication of intolerance. *definicion.org* (s.f.) Retrieved from December 2014, [15]

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