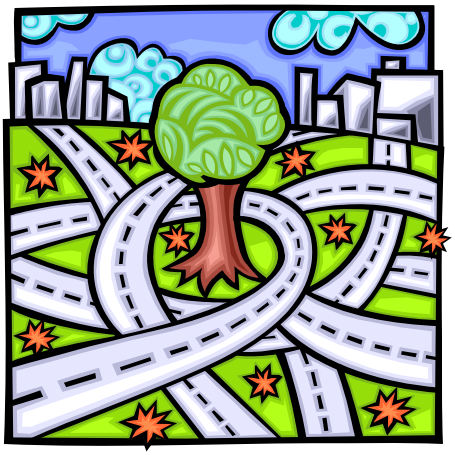
Volume 18, Number 1 **Spring 2005**

Myth and Realities Associated to Urban Development



There are many important factors to consider when acquiring a real state: the most important of all is the location and having this factor in mind, the main conflict that real states have are related to traffic.

The impact on traffic problems is more severe in the local region, although this impact is felt in other regions too. It is a problem that affects a large number of places and persons. Traffic does not have municipal nor states limits. Decisions taken in one place will cause conflicts and arguments in other places.

Some citizens are based in technical reasons, authorities can not perform and stay trapped in the middle of indecisions and chose the politics to evade the situation. The problem is who to blame developers, authorities, or the neighbors?

Some projects have been canceled because people go on strike ignoring the rights and obligations of proprietary to develop their lands.

Many times, the evidences presented by the parts are not based in technical reasons, but in myths and unfortunately many of them are taken as realities. Much of these perceptions are sustained in weak bases and emerge from myths. Some politicians or professionals can not find the most appropriate way to discredit them.

Continued on Page 2...

Myth	Reality
Many of the traffic problems that we experience are caused by failures of an adequate planning.	The traffic problems we have generally are not caused by a slip of an adequate planning, but by the implementation of the authorities of applying those plans.
By stopping the development, we will bring to halt the traffic growth.	Traffic growth will increase weather or not new developments are built because public transportation does not satisfy the necessity of population to move from place to place.
The growth of municipalities is attributed only to new neighbors.	Within municipalities there are many areas or sites intended to be built for new developments or by actual residents. Sometimes, big undeveloped sites are surrounded by neighbors. It is a fact that the opening of new streets and avenues will also serve actual residents of the municipality.
Major changes or adaptations in urban transportation, should be for those who work in the middle of the metropolitan area.	The main transportation dilemma is not the travel distance to get to the center of the metropolitan area but the necessity of citizens to transport to the suburbs to go grocery shopping or for business or any other target.
Suburbs citizens do not use public transportation	Suburbs residents use public transportation when the service is reasonable, quick and convenient.
The modern systems of mass transportation are necessary to avoid traffic congestion.	There is no evidence that traffic congestion will be avoided, because cities that have an efficient massive transportation system still have traffic congestion problems.
New roads and highways shall not be constructed in urban and suburban areas.	New roads and highways should and must be built in urban areas and throughout the entire State or country.
New roads and streets shall not be constructed nor repaired because they will eventually cause traffic congestion.	When the demand in new streets and highways increase it helps improve the traffic flow in other existent highways, proving that they were needed.
People may change their attitude if they depend lees in the vehicle.	For people to rely lees in the vehicle, it is necessary to improve the transportation systems, create incentives and provide choices to satisfy the user's needs.
Significant investment should not be made in transportation systems because soon they will be obsolete and new technologies will be developed.	The transportation systems for the near future will be very similar to the actual systems and should be used while new technologies are developed.

Adapted from Ruta Norte, year 1 Number 2 May 2003. Eng.
Sergio J. Vargas Lopez, M.A.E.

When Editing ...

In This Edition…

Urban Development...Myths and Realities……1

When Editing……...……3

Medellín Metro Cable …….. ……..4

Vegetation Control for Safety……...5

Updating the Mailing List……...6

Future Events…...……7

Staff:

Co– Directors

Benjamín Colucci
Felipe Luyanda

Program Manager

Gisela González

Text, Art and Graphics

Melissa M. Sánchez
Deborah I. Rodríguez

Whenever you write something, you should know how to edit and polish your own copy. Here are some practical guidelines to follow when editing:

- ***Brevity*.** Cut every word that adds nothing to the meaning. Examples: Change "during the course of" to "during" and "few in number" to "few."
- ***Clarity*.** Don't use vague adjectives when specific ones are called for. Don't write "We received numerous inquiries." Instead write "We received 14 inquiries."
- ***Tone and style*.** Make sure your words sound as if they come from a human being- and not an institution. Example: Instead of writing "Further notification will follow," write "I'll keep you informed."
- ***Variety*.** Avoid starting each sentence with the same part of speech, such as a noun or pronoun. Caution: Don't try to start each sentence with a different part of speech. Just strive for some variety.
- ***Content***. Make your purpose immediately clear. Don't force your reader to wade through several paragraphs before understanding why you wrote the piece.
- ***Paragraph strength*.** See to it that each paragraph deals with only one topic. Including too many will make your reader work too hard.

Medellin Metro Cable

The Metrocable of Medellín was inaugurated in July of 2004, consists of 90 cabins of a cable railway that will provide public transportation in one of the poorest sectors of Medellín. The Metrocable and its 90 cabins cover a sector with a population of 120,000 of 9 wards located in the northeastern part of Medellín.

The population of these sectors used deteriorated buses and cars to go up and down the hill, that challenge their brakes. They fight with the rage to find a slower car in front acting as a wall, where only one car may pass at the same time. This presents a risk and a challenge due to the poor maintenance and determination of this vehicles traveling in a one lane street. Others decide to walk up and down the hill.

For the population of these 9 wards used to poverty and state oversight, these cabins represent the arrival of progress since they have never experienced a project with this magnitude, a mega project for transportation of 66 billion pesos($25,803,890). The Metrocable is the third line of the Metro hooked in the cable maintained by 20 white cylindrical towers.

The arrival of the Metrocable, which construction began in December 2003, reinforced a rehabilitation process in some community groups that has reduced, in a 79 percent, the homicides in the course of one year, according to the Office of the Secretary of Government of Medellín.

The best contribution of The Metro Cable is the rise in the economy provocated by its integration to the Metro. This integration will allow the users to travel to 25 stations for 950 pesos ($0.38), which today requires taking two or three buses at a cost of 2,700 pesos ($1.09). This trip to the Center may take approximately 40 minutes, while with the Metro Cable it will only take 20 minutes.

The ABC of the Metrocable

- The overall cost of the project was distributed between: The Municipality and operational funds of the Metro.
- Each cabin of the system has capacity for 10 people (8 seated and 2 standing). Weighs 500 kilograms empty plus 200 kilograms of the pincer that sustains it on the steel cable.
- It will transport 25 thousand people daily between Santo Domingo Savio and the station Acevedo from line A of the Metro.
- The 2 kilometers of the Metrocable pass through 4 stations: Acevedo, Intermediate One, Intermediate Two and Retorno.
- The cost of the ticket will be 950 pesos ($0.37). With this, the user will be able to travel in the cable railway unto Acevedo station and from there to any of the 25 terminals of the Metro.
- The schedule of the system will be: Monday to Saturday of 4:30 a.m. to 11:00 p.m. Sundays and holidays from 5:00 a.m. to 10:00 p.m.
- The Metrocable operates automatically and does not require a driver in the cabins. The cabins move when they are hooked to the cable railway that is moved by two pulleys driven by an electric motor, connected to the energy of the Metro.
- The cabins enter to the stations every 12 seconds, this allows to transport3 thousand passengers per hour.

Adapted from: El Tiempo.com-Panorama

Vegetation Control for Safety

During the growing season, maintenance of grass and roadside often limits a driver's sight distance. Lush vegetation hides pedestrians and bikers from the driver's view, and vice versa. Vegetation should be trimmed often.

The main goals for vegetation control include:

- Keep signs and vehicles visible to drivers, pedestrians, and bike riders in cross walks, street lights, not signalized intersections, and bike paths.
- Assist pedestrians and bike riders to notice oncoming traffic more easily.
- Improve winter road maintenance in snow and ice areas.

Line of Sight Clearance

Intersections require a clear line of sight along crossroads to prevent vehicle, pedestrian, and cyclist collisions. A clear line of sight allows adequate distance for drivers to react safely to each situation. To keep signs and traffic visible, the following maintenance steps, should be fallowed:

- Look for signs and other traffic control devices blocked by bushes, trees or grass. Prune the vegetation blocking the driver's view of a signs along the shoulder.
- Follow the municipal policy regarding the distance for a sign in which vegetation has to be cleared for safe view. The distance must be enough to allow the driver 3 to 5 seconds to read and respond to the sign.

Adapted from Road Business, Vol.18, No.4

"A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise."

Aldo Leopold

The Transportation Technology Transfer Center ha available 10 copies of Posters with illustrations of invasive vegetation on roadside. To obtain a free copy call us at 787-834-6385.

Actualización de Nuestro Directorio

Ayúdanos a actualizar el directorio del Centro de Transferencia de Tecnología en Transportación completando esta hoja de información y enviándola por facsímil al numero (787) 265-5695. Muchas gracias.

☐ AÑADIR ☐ REMOVER ☐ CAMBIAR

NOMBRE_____ PUESTO_____

MUNICIPIO/AGENCIA_____

DIRECCIÓN _____

CIUDAD_____ESTADO_____ZONA POSTAL_____

TELÉFONO_____FAX_____

CORREO ELECTRÓNICO _____

Update the Mailing List

Please help us update the Puerto Rico Transportation Technology Transfer Center Mailing List by completing this form and sending it via FAX at (787) 265-5695. Thank you!

☐ ADD ☐ DROP ☐ CHANGE

NAME_____ TITLE _____

MUNICIPALITY/AGENCY _____

ADDRESS_____

CITY_____ SATE _____ ZIP CODE_____

TELEPHONE_____ FAX _____

E-MAIL _____

FUTURE EVENTS

July 23-27, 2005
2005 National LTAP/TTAP Annual Conference
Web-Page: www.kutc.ku.edu

September 11-14, 2005
2005 APWA International Public Works Congress and Exposition
Minneapolis Convention Center, Minneapolis, Minnesota
Web-Page: www.apwa.net

October 16-21, 2005
World Federation Engineering Organizations 2005
Caribe Hilton Hotel, San Juan, Puerto Rico
Web-Page: www.wfeo2005.org

The following journals of the Transportation Research Board, TRB, are available for lending through the Transportation Technology Transfer Center:

TRR No.	Publication
1883	Traffic Flow Theory and Highway Capacity and Quality of Service 2004
1884	Transit Bus, Rural Public Transportation, and Paratransit
1885	Transportation Management and Public Policy 2004
1886	Intelligent Transportation Systems and Vehicle-Highway Automation 2004
1887	Transit Planning and Development, Management and Performance, Marketing and Fare Policy, and Capacity and Quality of Service
1890	Highway Facility Design 2004 Including 2004 Thomas B. Deen Distinguished Lecture

In addition the compact disc of the 2005 TRB Annual Meeting, is available for loan. For additional information, please contact us at 787-834-6385.

The Center's staff welcomes your questions and suggestions. To contact the Center, please send all correspondence to the following address:

PR LTAP
Transportation Technology Transfer Center
Civil Engineering and Surveying Department
PO Box 9041
University of Puerto Rico
Mayagüez, Puerto Rico 00680

Telephone (787) 834-6385 **Fax (787) 265-5695**

E– mail: gvilla@uprm.edu
www.prt2.com

El Puente is published by the Transportation Technology Transfer Center, College of Engineering, University of Puerto Rico. The opinions, findings, or recommendations expressed in this newsletter are those of the Center staff and do not necessarily reflect the views of the Federal Highway Administration, Puerto Rico Department of Transportation and Public Works, or the Virgin Island Department of Public Works.

Departamento de Transportación y Obras Públicas

US Department of Transportation
Federal Highway Administration

Gobierno de Puerto Rico
Autoridad de Carreteras Y Transportación