



## Major UK tramway with the best scheduling of the operation



### Metrolink: GOAL SYSTEMS' latest achievement together with RATP DEV for scheduling and operating Manchester tramways

OCTOBER 2012 — Manchester, UNITED KINGDOM. Metrolink, a subsidiary of RATP Développement, operates and maintains the Manchester streetcar network. **GOAL SYSTEMS will be responsible for the optimal planning of the tramway rolling stock and conductors**, adding yet another project to its current work with RATPDEV, which includes Bombela, in the quick planning for Johannesburg-Pretoria in South Africa, the Algiers Metro in Algeria and the Casa Tram in Casablanca.

The Manchester tramway has **40 kilometers of track** and consists of **4 lines** and **48 tramways** transporting **21 million passengers each year**. They have an ambitious plan to expand the number of lines and their lengths, and the amount of streetcars, **in order to make it one of Europe's largest tramway systems**.

The project will consist of **implementing the GoalRail®metro and GoalStaff® tools** for optimal planning of both the tramway and their personnel.

[Goes to page 02](#) ▶

## Querétaro could reduce its operating costs by up to 27%



The GoalBus® tool will be responsible for optimizing the operations of Querétaro's Integrated Transportation System

NOVEMBER 2012 — Queretaro, MEXICO. **GOAL SYSTEMS AND NR TEC technological development, will help modernize transportation in Querétaro**, one of Mexico's largest and most highly developed cities.

[Goes to page 02](#) ▶

## The Mexican BRT Macrobus towards maximum efficiency

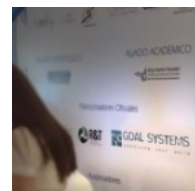


The Macrobus BRT system, in the city of Guadalajara in Mexico, has selected GOAL SYSTEMS' most advanced scheduling system

OCTOBER 2012 — Guadalajara, MEXICO. **The Macrobus transportation authority has selected GOAL SYSTEMS** to perform the optimal planning of its bus operation system.

[Goes to page 03](#) ▶

## Promoting sustainable transport



GOAL SYSTEMS sponsors the International Conference on Best Practices and Sustainable Mobility in Cali

NOVEMBER 2012 — Cali, COLOMBIA. The auditoriums of the BOGOTÁ CHAMBER OF COMMERCE's magnificent building in the Salitre Business Center were the location for the "SIBRT and Sustainable Transportation Workshop" as part of the "Cities and Climate Change" event. This event was attended by figures, experts and governments from across the Latin America region, who shared their ideas and expertise on how to improve public mass transit in order to decrease emissions and pollution in order to halt climate change.

[Goes to page 02](#) ▶



## Metrolink: GOAL SYSTEMS' latest achievement together with RATP DEV for scheduling and operating Manchester tramways

◀ From page 01

With the need to expand the network, Metrolink will involve doubling the fleet of rolling stock, to launch four new lines into service within five years and **feels that working with GOAL**

**GoalRail@metro and GoalStaff@ will provide optimal planning of both the tramway and their personnel**

**will be strategic**, due to its current scheduling tool being obsolete. This means they need **GoalRail@metro** and **GoalStaff@** in order to ensure that their routes and shifts will be scheduled optimally and reliably during the critical phase of the network's expansion.

**The project means that RATP has thus committed itself to optimization**, and that GOAL SYSTEMS is achieving geographical expansion by establishing a presence in the British market, all while solidifying its relationship with RATP DEV.

## The GoalBus® tool will be responsible for optimizing the operations of Querétaro 's Integrated Transportation System

◀ From page 01

A tender by NR TEC including GOAL SYSTEMS technology has been selected as **the winner for an initiative by the government of Querétaro for its integrated transportation system**, which will address the city's mobility needs.

Querétaro's metropolitan area currently spans 107 square kilometers, with roughly 400,000 vehicles, 1500 of which are for urban mass transit, meeting a demand of **700,000 users and traveling 244 kilometers per unit per day**.

The integrated public transportation system will involve installing a major corridor with an exclusive use lane and intermediate stations, terminals from which the corridor's routes will depart to major destinations, operated with "standard" buses, feeder routes from the surrounding neighborhoods to the nearest station and auxiliary routes that will connect to other destinations in the metropolitan area. The initiative's main objectives will include purchasing low-floor buses, optimizing and regulating schedules, and implementing exclusive use lanes, pre-payment system, main arteries, and satellite monitoring of units in order to guarantee service.

By optimizing the transportation network, the initiative plans to **reduce the number of buses by 27%, decrease the distance**

**traveled from 133 million km to 80 million km, and save 17 million liters of diesel fuel** over this period of time.

**GoalBus® will be used for creating schedules, adjusting supply to meet demand, optimizing the fleet of buses, simulating and redesigning the routes across the metropolitan Querétaro area**, including the metropolitan artery, the auxiliary routes and the feeder routes.

This **entire innovative process will be referred to as the Q Network**, which

will include all of the plans for the Restructuring Program for the Metropolitan Querétaro Public Transportation System.



**GoalBus® will optimize the fleet of buses, simulate and redesign the routes across the metropolitan Querétaro area**



## GOAL SYSTEMS sponsors the International Conference on Best Practices and Sustainable Mobility in Cali

◀ From page 01

At one of the sessions sponsored by SIBRT and EMBARQ, the General Managers of TRANSMILENIO (Bogotá), PROTRANSPORTE (Lima), TRANSMETRO (Barranquilla), METROLÍNEA (Bucaramanga), METROCALI (Cali) and METROPLUS (Medellín)

were in attendance, together with the Development Manager of TRANSANTIAGO (Chile). There, the Assistant Manager of GOAL SYSTEMS' Latin America offices, Angel Diaz, took the opportunity to discuss **how optimization systems are ideal as a basic tool for resource planning** and how they do not conflict with other systems for significantly reducing emissions of CO<sub>2</sub> and highly polluting waste.

From left to right, Oscar Botia and Oswaldo Ardila in front of GOAL SYSTEMS stand

More specifically, GOAL SYSTEMS focuses on three different indicators that an optimization system can improve, which are directly related to climate change:

- 1. Decreasing the number of buses that need to be used.** This decrease translates into fewer emissions, less pollution and greater availability of financial resources.
- 2. Decreasing the distances that must be traveled without passengers.** A decrease of up to 30% means fewer emissions, decreased use of fossil fuels and fewer residual contaminants (oil, tires, etc.).
- 3. Meeting passenger demand with available resources.** In many of the cases discussed, the managers mentioned that they had reached a maximum number of buses that would be difficult to surpass. Having an optimization tool makes it possible to use the available resources to meet growing demand. Meeting demand means satisfying passengers who do not opt for individual transportation, thus meeting the goal of preventing climate change.

With its products, GOAL SYSTEMS provides today's mass transit managers with the tools they need **to have clean systems that are environmentally respectful.**

Thus, on **November 15-16, GOAL SYSTEMS sponsored the International Conference** on Best Practices and Sustainable Mobility organized by the Latin American Integrated and BRT Systems Association, SIBRT and by MetroCali.

At the event, GOAL SYSTEMS had the opportunity to show the managers of integrated transport systems that still do not have the **GoalBus® and GoalDriver® systems**, the success achieved in Transmilenio and the Bogotá SITP, Transantiago de Santiago in Chile and the Guadalajara Macrobus as examples from Latin America, together with other examples from around the world.

**Around 200 executives, operators and companies from ten countries attended the event.** The conference was supported by EMBARQ and the municipality of Santiago de Cali, and it brought together participants from Argentina, Brazil, Chile, Colombia, Ecuador, Spain, Mexico, Peru, Sweden and Venezuela.

## The Macrobus BRT system, in the city of Guadalajara in Mexico, has selected GOAL SYSTEMS' most advanced scheduling system

◀ From page 01



The project will consist of programming, configuring, launching and providing training for the **GoalBus®** tool for the comprehensive operations of the transportation system's feeder units and the units in its main artery. **GOAL SYSTEMS will equip Macrobus with the latest technological tools for optimizing the adaptation of its services to the city's demand.**

**Macrobus scheduled with GoalBus®, provides a high quality service that is fast, safe and efficient**

Macrobus, inspired by the Bus Rapid Transit (BRT) model, provides a high quality service that is fast, safe and efficient.

Macrobus consists of a **16 km long main artery** with **41 component units** and **103 feeder units** distributed in **15 routes**. The system serves just over **127,000** passengers every day.

Macrobus was conceived as a multimodal system to complement the Urban Electric Train System (Sistema de Tren Eléctrico Urbano - SITEUR). Together, **Macrobus and SITEUR** represent **the modern expanding mass transit offering for the greater Guadalajara area**, with its population of over five million inhabitants.



