VIAJEO PLUS

D8.7 Virtual Solutions Book

Author(s)	Silvia Curbelo			
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Project Coordinator	Yanying Li ERTICO – ITS Europe Tel: +32 2 400 07 37 E-mail: y.li@mail.ertico.com			

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Document Control Sheet

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Introduction

The level of traffic congestion and air pollution from road traffic is becoming a huge problem in many cities in Europe and emerging market countries such as China and Brazil. It reduces the quality of life of city dwellers and even poses a challenge to public health.

More and more people live in cities, which increases exponentially the mobility demand. Although the traditional response to this by decision-makers has been based on the development of infrastructure to increase capacity, it is increasingly clear that this measures are not sustainable and do not avoid problems re-appearing in the near future.

Thus, as early as 1990s, many transport professionals realised that construction of new roads (including widening existing roads) would not lead to a sustainable future transport situation in cities. By then, urban motorways or arterial roads in some major cities in developed countries which were built in the post war era have been regarded as a mistake in urban planning and development since they often generate congestions, noise, air pollution as well destroy characteristics of a city. Such roads reduce accessibility to other transport modes, increasing people's dependency on private cars and reducing overall quality of life in a city.

Consequently, policies have been shifted to better management of existing capacity for all modes of transport and increasing share of more sustainable transport modes, e.g. public transport, cycling and walking. Those policies often have a wide range of objectives such as curbing greenhouse emissions from the road transport sector in order to address the global challenge of climate change. To achieve such policy objectives also requires new infrastructure in urban areas, aiming to support sustainable transport solutions, e.g. dedicated lanes to bus and bicycles and public transport interchanges.

The Viajeo PLUS Virtual Solution Book aims to showcase some of the most outstanding innovative and sustainable solutions implemented worldwide to address the growing mobility demand.

The Viajeo PLUS consortium aims this tool to provide inspiration for policy-makers worldwide showing the path towards a more sustainable energy mix in cities enabled by new technologies and innovative ways to re-think mobility.
The final version of the tool is available online since 19 February 2016. It has been promoted using the project's website and social media, as well as partners' dissemination channels (e.g. ERTICO Network and ERTICO weekly newsletter).

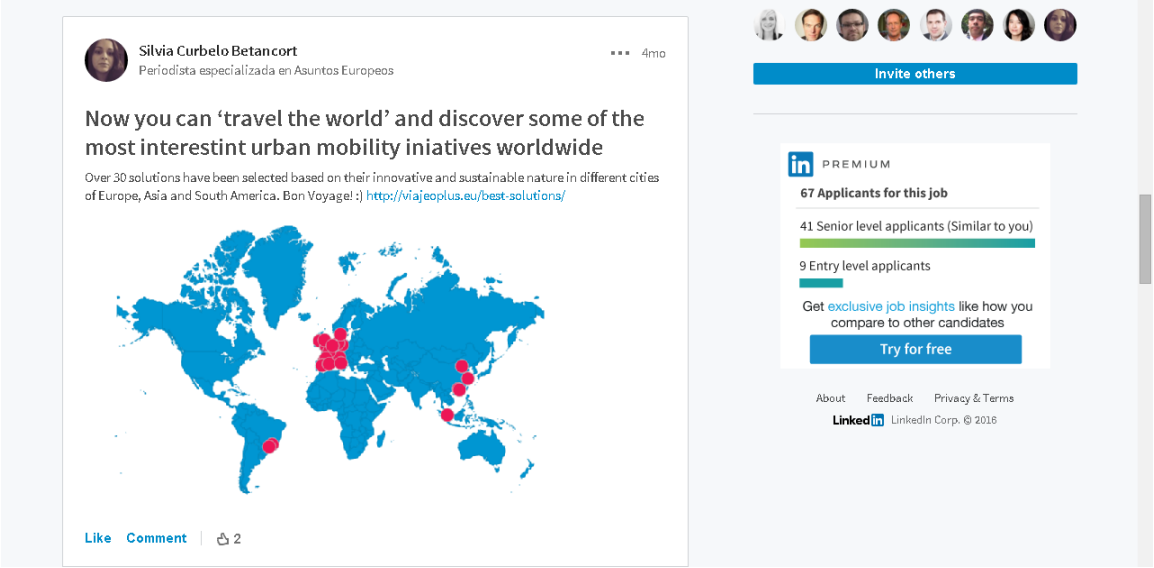


Figure 1 Promotion of the new tool through LinkedIn

Virtual Solution Book: a tool for the exploitation of results

Viajeo PLUS has developed a Virtual Solution Book to facilitate the consolidation and exploitation of the project's outcomes. The Virtual Solutions Book is an online knowledge centre which provides a catalogue of cities' experiences on their past, present and future uptake of innovative and efficient mobility solutions.

To enable users to search and find information easily, this tool includes two different ways to retrieve information:

1. **Geographical criteria**: a map is pinned win the cities where outstanding and innovative urban mobility solutions have been carried out.
   When the user clicks on the pin, a summary of the solution(s) unfolds below the map, including a link to the relevant deliverable where more in-depth information is available.

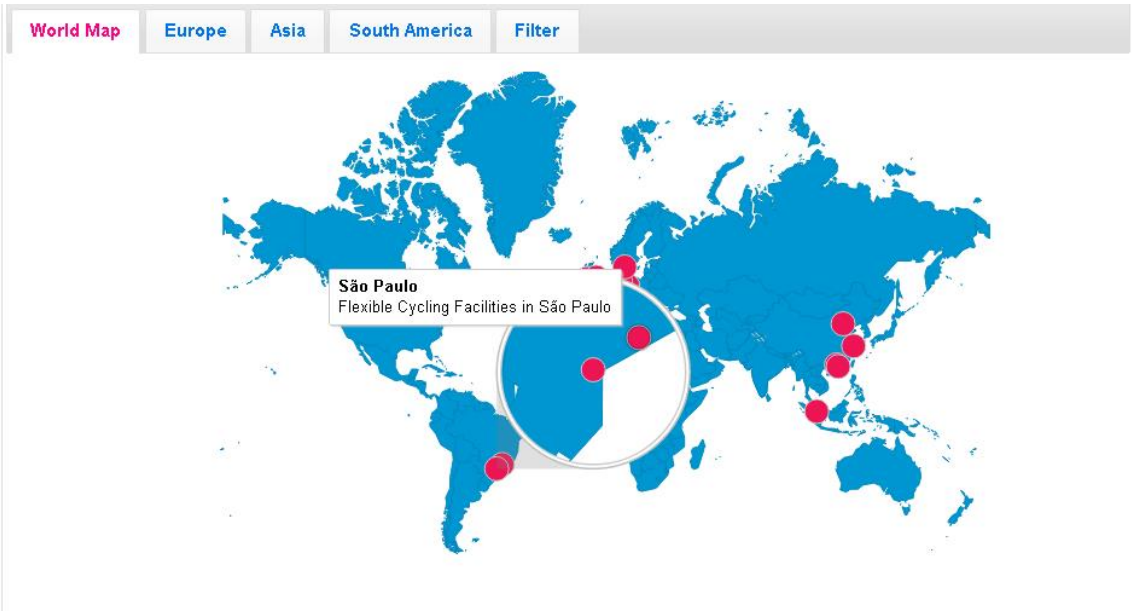


Figure 2 Selection of a solution from the map

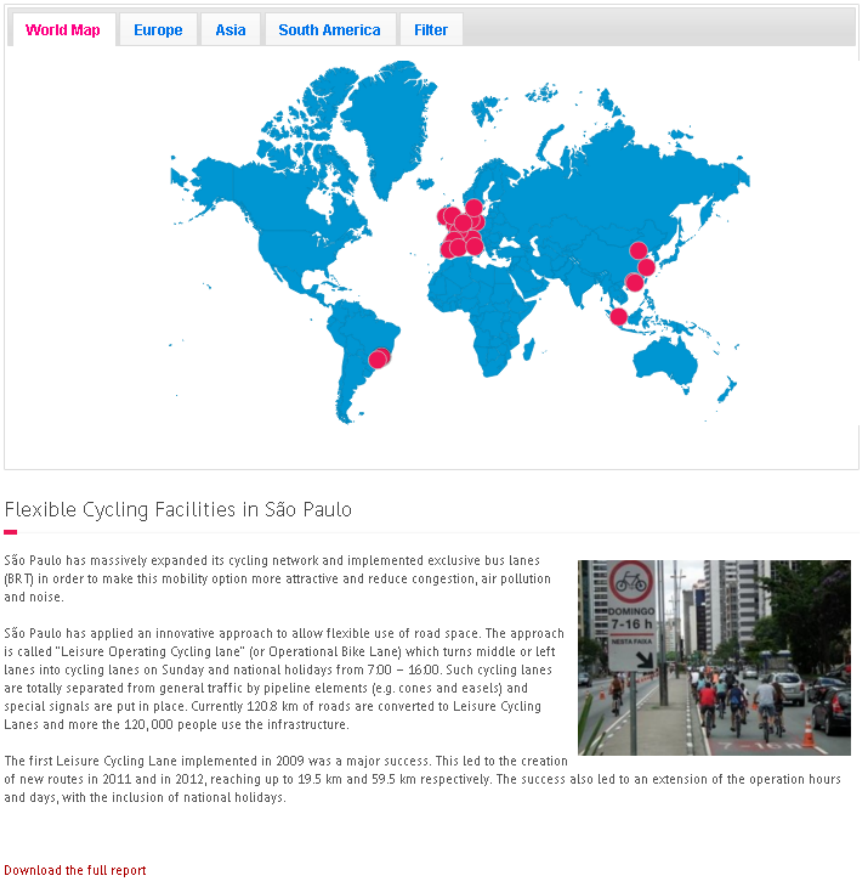


Figure 3 Display of the solution under the map

2. **Thematic Focus**: Users can retrieve easily all the solutions related to a specific research focus area of Viajeo Plus by ticking one or more of the tick boxes included in "Filter".

   These thematic criteria can be associated to geographical areas, although this step is optional for users. Once the user gets a list of the solutions associated to his/her criteria, the user can click on any of them.

   Afterwards, a summary of the solution will be displayed below with a link to the relevant report where more detailed information can be found.

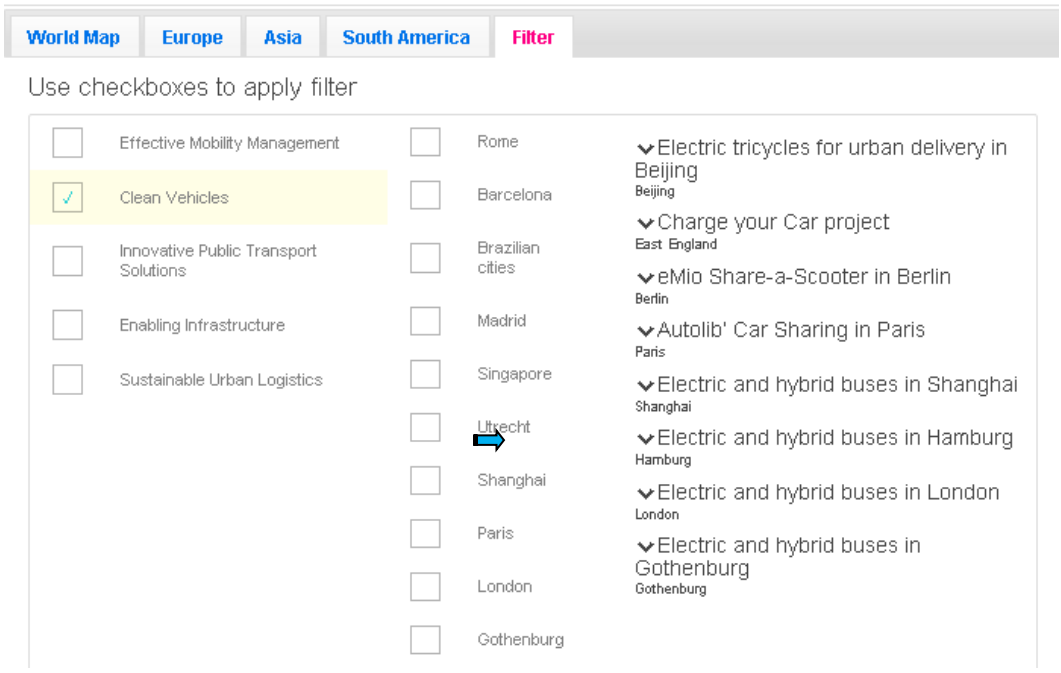


Figure 4 Selection of a solution from the filter

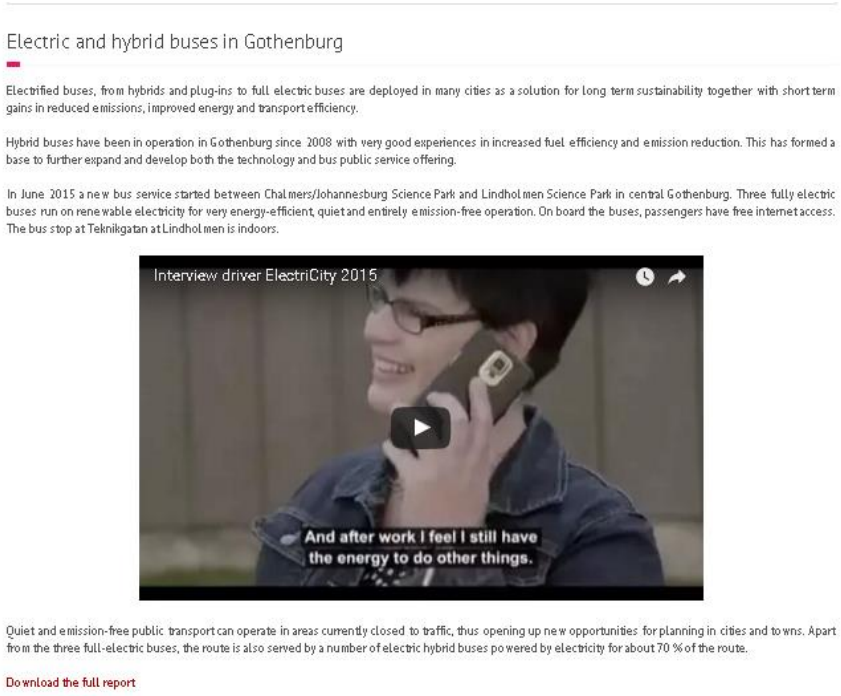


Figure 5 Display of the solution under the filter

To develop the Virtual Solutions Book, best practices identified in the city matrix will be added and the catalogue will be further enhanced with all the case studies prepared in WP3 – WP7. The Virtual Solutions Book has remained open to all cities willing to contribute with their best practices in fields such as technology, policy, planning, standards/certification and market take-up.

The version of the Virtual Solution Book explained above is not the first one. A more rudimentary approach to this tool was available before. The contents covered did not have the same depth and soundness as the ones available in the new Virtual Solution book and the deliverables available in the digital library. Furthermore, the visual features and the search options have been improved in version 2. (now named "archive") is included near the current Virtual Solutions Book.

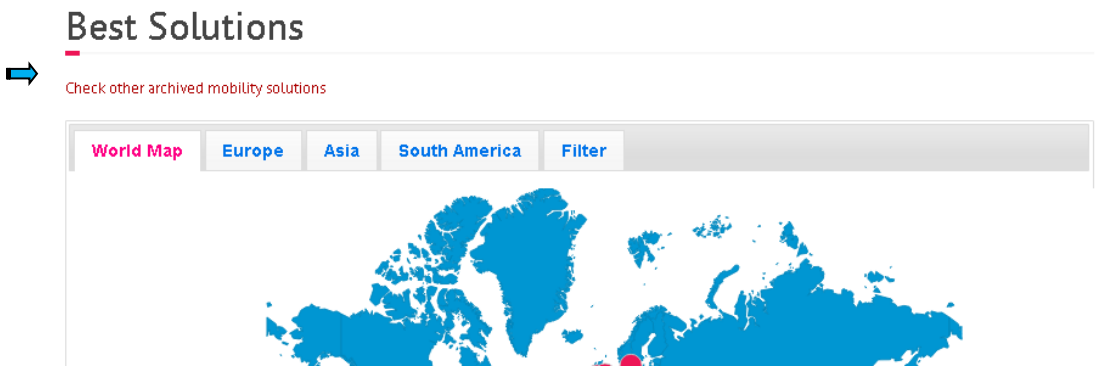


Figure 6 Access to the archive

Best Solutions

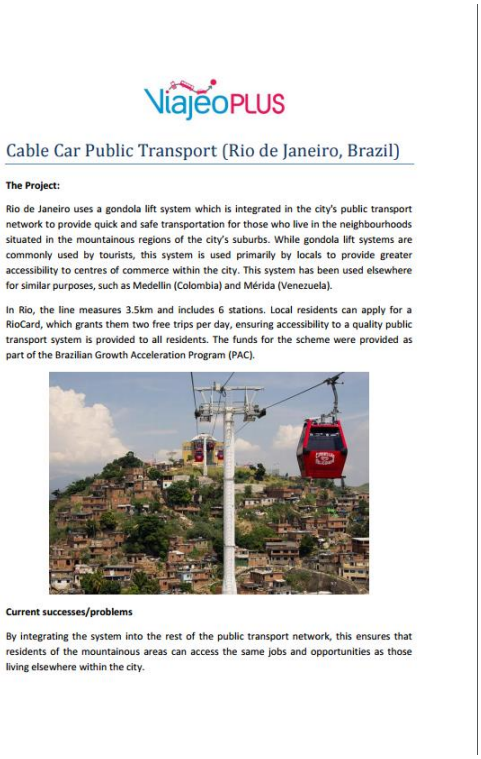
This table details the best practice solutions collected by the partners of the Viajeo-Plus project. Clicking on the location of the best practice will bring up a more detailed overview of the project.

Focus Areas:					V+ Best Practices	
Effective Mobility Management	Clean Vehicles	Innovative Public Transport Solutions	Enabling Infrastructure	Sustainable Urban Logistics	Location	Solution
X		x			Beijing	Transport Demand Management
X		x			The Hague	Multi-Criteria Traffic Management
X		x			Jundiai	Adaptive Traffic Control
X		x			Verona	Integrated Mobility Management
		X			Brazil	BRT Systems
		X			Istanbul	BRT System
		X			Cuneo	Integrated Smart Ticketing
		X	x		Madrid	Public Transport Interchanges
x		X			Istanbul	Real-Time Traffic Information
		X			Rio de Janeiro	Cable Car Transportation
	X	x			Sao Paolo	Clean Fuel Programme
		X			Shenzhen	Integrated Rail and Property Investment
		X			Zaozhuang	BRT System
	x		X		Amsterdam	Electric Vehicle Charging Infrastructure
	X	x			Nanjing	Electric Bus Charging & Maintenance
	X	x	x		Shanghai	Public Transport Interchange
	X	x			Shanghai	Electric Bus Operation
	x		X		North-East England	Electric Vehicle Charging Infrastructure
	X	x			Gothenburg	Electric Buses
		X			Gothenburg	Bus Route
	X			X	Gothenburg	Freight Microterminal
		x	X		Curitiba	BRT with overtaking lanes
		X			Jinan	Predicting transport demand

Key: X = Primary Policy Area. x = Secondary Policy Area.

Figure 7 Overview of the archive

This older version presented information in a Matrix, where location and focus areas and solutions were intertwined. It was not very user friendly and not very suitable for long lists where the user needs to scroll down and read line by line in order to find a solution which is of his/her interest. The city names where hyperlinked to a PDF file with some basic information about the solution. However, the level of detail and accuracy was lower than in version 2, which link to the deliverables, where all relevant information is included.



ViajeoPLUS

Cable Car Public Transport (Rio de Janeiro, Brazil)

The Project:

Rio de Janeiro uses a gondola lift system which is integrated in the city's public transport network to provide quick and safe transportation for those who live in the neighbourhoods situated in the mountainous regions of the city's suburbs. While gondola lift systems are commonly used by tourists, this system is used primarily by locals to provide greater accessibility to centres of commerce within the city. This system has been used elsewhere for similar purposes, such as Medellin (Colombia) and Mérida (Venezuela).

In Rio, the line measures 3.5km and includes 6 stations. Local residents can apply for a RioCard, which grants them two free trips per day, ensuring accessibility to a quality public transport system is provided to all residents. The funds for the scheme were provided as part of the Brazilian Growth Acceleration Program (PAC).

Current successes/problems

By integrating the system into the rest of the public transport network, this ensures that residents of the mountainous areas can access the same jobs and opportunities as those living elsewhere within the city.

Figure 8 Example of archived solution displayed

Conclusions

Viajeo PLUS has developed a Virtual Solution Book to facilitate the consolidation and exploitation of the project's outcomes. The Virtual Solutions Book is an online tool for transport professional worldwide who are interested in learning about and getting inspired by the selection of some of the most innovative and sustainable urban mobility solutions implemented in Europe, Asia and Latin America.

The Viajeo PLUS Virtual Solution Book aims to showcase some of the most outstanding innovative and sustainable solutions implemented worldwide to address the growing mobility demand.

The Viajeo PLUS consortium has developed this tool with the purpose to provide inspiration for policy-makers worldwide, showing how different mobility challenges have been addressed with a long-term, sensible vision adapted to the local needs.

It is one of the main outputs of the project, which aims to foster knowledge-sharing, creating a fertile field for cross-learning and replication, and bridging the common interest of public authorities and other transport stakeholders from different continents.