

# Sustainable Mobility Innovations

## Our experts' choices Summer 2014



The world of “sustainable mobility” is full of innovations. On a daily basis, new tools, approaches and concepts are developed, tried and implemented to make the life of pedestrians, cyclists and public transport users more comfortable.

As part of their daily routine, our mobility experts around the world are constantly looking for such innovations – please find below their discoveries. Some of these innovations are not new or innovative on a global scale, but are adapted to suit local conditions and hence worthwhile to be included in this list and shared.

### New urban ropeway in Ankara



Photo: © LEITNER Ropeways

The new ropeway in Ankara, now the largest of its kind in Eurasia, has just opened to the public. Offering spectacular views from up to 60 m above ground, the new public transport service is in fact intended to function as a feeder service and connect the neighborhoods of Şentepe and Yenimahalle to the metro network of Ankara. It is expected that travel time, energy use, and the overall environmental impacts of commuting will be significantly reduced with the new service. The new public transport scheme exemplifies yet another benefit of ropeways: four stations and a system length of 3 204 meters, with a transport capacity of 2 400 persons per hour in both directions has needed just 10 months of planning and construction to be fully operational – far quicker than most mass transit systems. More information at <http://green.wiwo.de/schweben-statt-im-stau-stehen-seilbahnen-erobern-die-metropolen>.

### “Prescribe-a-Bike” launched in Boston, Massachusetts

The City of Boston in partnership with the Boston Medical Care Center has announced a program to subsidise bike-sharing for low-income residents. Doctors at the Boston Medical Care Center can now prescribe patients with annual memberships to Hubway, the Boston bike share program, for only USD 5. This program provides access for low-income residents to mobility at nearly no cost. Boston Medical Center officials also stated that the program is intended to address obesity, a growing health

concern. The City of Boston hopes that the new program will increase the number of subsidised users from 900 to 1 900. More information at <http://www.bostonglobe.com/metro/2014/03/27/new-program-will-allow-boston-medical-center-doctors-prescribe-bike-sharing-program/zjwLfCtAE-GfWYxVn4CiN/story.html>.

### The bike elevator

Car focused planners often question the ability of bicycles to serve transport needs in cities with hilly terrain. A practical solution might however already exist: the Trampe CycloCable. In fact, first installed in 1993, the cycle lift has powered more than 200 000 users up a steep 130 m hill in Trondheim, Norway – with no accidents recorded. In 2012 the original was dismantled and replaced by an updated version in 2013, which now handles up to 300 cyclists per hour. The lift, which works much like a ski-lift, costs about as much as a bike lane and a survey conducted in 2007 has shown that people are actually encouraged to use their bikes more often because of the lift. Now unique to Trondheim, the system has increasingly drawn attention by other cities with steep terrain.



Photo: © Trampe CycloCable

For more information please see <http://www.theatlanticcities.com/commute/2014/04/bike-elevator-take-you-steep-hills/8774>.

### TransitScreen

TransitScreen broadcasts real-time information on the availability and predicted arrivals of all transit options adjacent to a location. The idea might sound fairly simple but it is surprising

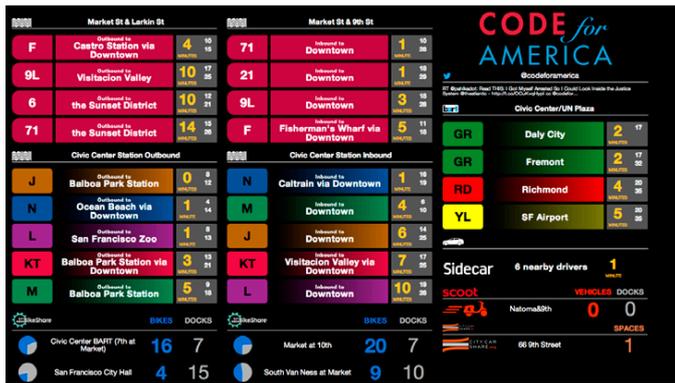


Photo: © TransitScreen

how rarely real-time multimodal transport information is used to make commuting more convenient. TransitScreen typically includes real-time information on metros, buses and bike sharing, but might be customised to integrate weather, twitter, maps, and other applications useful for commuters. Founded in 2012, TransitScreen is already serving 14 major metropolitan areas in the US and Canada. The service is increasingly added to cities Transport Demand Management (TDM) plans because it is expected that if people exactly know what their mass transit options are, they are much more likely to use them. For more information please see <http://www.theatlanticcities.com/commute/2014/02/these-real-time-transit-screens-belong-every-lobby/8475> or <http://www.transitscreen.com>.

### Smart license plates

Traditional license plates do little to prevent car theft because they can be easily transferable to another vehicle. A group of German companies has been working on a new addition to the traditional, embossed license plates – an intelligent license tag that stores information such as the license plate number, registration expiration date, authorized drivers, and information on vehicle taxes and insurance. The tag uses RFID technology, as well as holograms to deter car theft. The data can be encrypted, and the memory segregated into different areas, allowing for secure information storage. This also would allow the tag to be used by private companies to allow for access to private parking lots and paying for fuel or tolls. The tag has taken off in South America, the Middle East and South East Asia, with the hope that it will help generate additional revenue by catching unregistered vehicles. While it may not replace traditional license plates anytime soon, the additional security provided by the intelligent tag can help deter car thefts, and ensure proper registration, insurance and payment of vehicle taxes.

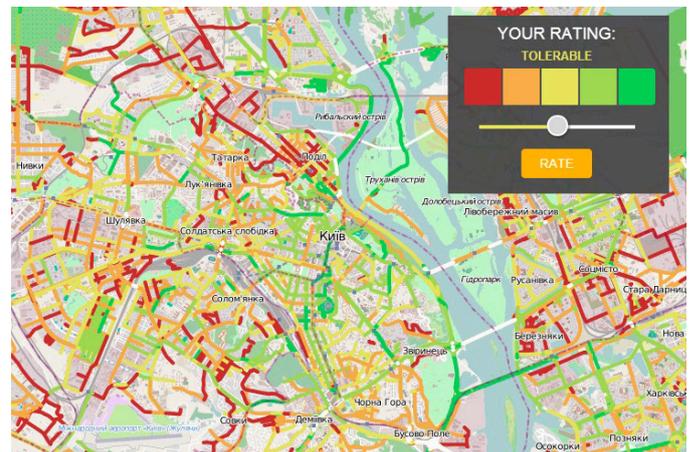
For more information see: <http://www.rfidjournal.com/articles/view?89>, <http://www.zeit.de/mobilitaet/2014-04/autokennzeichen-rfid/seite-2>.



Photo: © Utsch

### Crowdsourcing road conditions

Road quality is a source of much frustration for many Ukrainian drivers and driving on poor quality roads can lead to delays, stress, physical injuries or costly car repairs. Finding the best route for a trip required significant time and energy, and one often encountered ambiguous and outdated information. The Ukrainian internet-based social non-profit dorogy.net, together with the Ukrainian IT company bvblogic decided to do something about it. Together they created an online map that sources information from the public in order to not only help private citizens plan more comfortable trips, but also to show the real state of the roads in Ukraine and other countries in the Commonwealth of Independent States. By developing a comprehensive assessment of road conditions and quality through their interactive map, they can ultimately help local authorities as well as central governments better react to and improve the conditions of the roads in Ukraine and the region. To date they have collected information on over 56 000 km of roadway, and plan to further develop a mobile application, and integrate the information with GPS-navigators.



For more information see: <http://www.dorogy.net> and <http://ain.ua/2014/04/17/520379> (in Ukrainian).

Contact: [Armin.Wagner@giz.de](mailto:Armin.Wagner@giz.de), more on <http://www.sutp.org>

### Disclaimer

Findings, interpretations and conclusions expressed in this document are based on information gathered by GIZ and its consultants, partners and contributors from reliable sources. GIZ does not, however, guarantee the accuracy or completeness of information in this publication, and cannot be held responsible for any errors, omissions or losses which emerge from its use. This document contains links to third-party web sites. The linked sites are not under the control of GIZ, and GIZ is not responsible for the contents of any linked site or any link contained in a linked site. The placement and listing of companies, academia or other stakeholders (or their logos, contact details or other information) in this publication doesn't mean any endorsement by GIZ or other partners. Users are encouraged to exercise due-diligence in respect to information, offers and proposals.