

# Regional Environmental Center's (REC) Carpool Scheme

## Introduction

A bespoke transport monitoring tool developed in-house has helped to reduce the Hungary-based Regional Environmental Center's (REC) carbon footprint and make staff commuting habits more sustainable.

Since the tool launched in 2015, staff commutes by single-occupancy cars fell **8%**, its ride-sharing community grew by **3.2%** and car use overall has fallen **5%**. As a whole, REC saved 21,537.19 Kg of CO<sub>2</sub> emissions and Eur 12,590, while staff pursuing more active or multiple modes of travel burnt 1,671,953.20 calories.

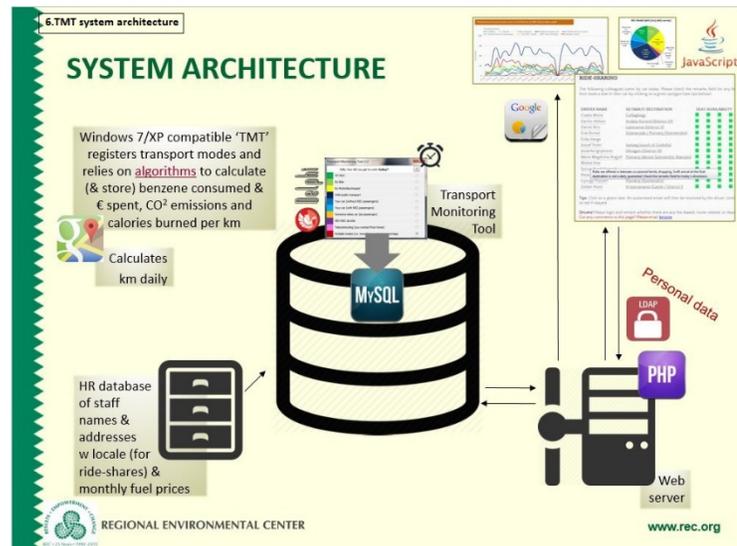


1. Ride-sharing builds team spirit!

## How it works

The tool was introduced as part of a larger workplace [mobility plan](#) that aimed to increase sustainable travel through several measures, including making cycling more convenient and raising awareness about public transport and car-pooling options.

The smart travel tool, however, was the plan's cornerstone, working both as a monitoring tool and a means of sharing information and imparting encouragement to the staff. Image no.2 shows the system architecture. It surveys daily habits and graphically reports upon their mobility patterns.



2. System architecture



3. Multiple Choice Questions

Each morning colleagues are invited to answer two multiple-choice questions: "How did you get to work today" and "How did you get home on the previous working day?".

By putting their responses through various algorithms, depending on their modes of transport and their starting point, REC derives their daily environmental, health and financial performance, which is then [reported](#) in terms of Benzene/HUF saved; CO<sub>2</sub> emitted/saved; and calories burnt. Colleagues can even tweet or share this data via Facebook.

**RIDE-SHARING** 11.RideSharingPlatformPlusMaps

The following colleagues came by car today. Please check the remarks field for any fee-based, route-related, or departure time-specific conditions and then book a seat in their car by clicking on a green polygon (see tips below). Please mouse-over a drivers' name to see if any regular conditions apply.

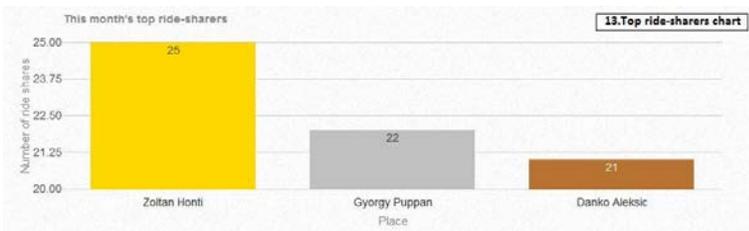
DRIVER NAME	ULTIMATE DESTINATION	SEAT AVAILABILITY	REMARKS
Aleksandra-Sasa Solujic	Astoria	Green	
Csaba Szabo	Izbeig (Szentendre)	Green	
Csaba Mezei	Celldömety	Green	
Danko Alekšić	Kodály Körönd (District VII)	Green	leaving at 17:00, short detour on the way
Daniel Biro	Lipótváros (District V)	Green	
Eva Dunszt	Szarvadás / Pásmány (Szentendre)	Green	
Gordana Kožuharova	Városliget / Hősök Tere (Heroes Square)	Green	
Janos Zilinszky		Green	leaving not earlier than 17:00, will stop for fuel, check w/m for exact timing if interested
Jerome Simpson	Izbeig (Szentendre)	Amber	leaving at 13:00
Jozsef Feiler	Isaszeg (south of Cádolka)	Green	
Maria Magdolna Angyal	Pásmány (above Szentendre Szarvadás)	Green	Leaving at 13:00
Mozes Kiss	Pilisvörösvár	Green	
Niko Goga	Újlipótváros/Capital Square (District XIII)	Green	Leaving at 19:30 from road
Silvia Pandi Szigedi	Budakalász (Szent István - telep)	Green	
Peter Stuppinger	Pillanarcs (Danaszék, benső)	Green	leaving at 16:30, on road II
Radoje Lavšević	Krisztinaváros (District VII)	Green	
Reka Virag-Prokai	Újlipótváros / Szepevölgyi út (District II)	Green	
Magdolna Szabo	Móricz Zsigmond körter	Green	
Zoltan Honti	Krisztinaváros (Castle / District I)	Green	
Zoltan Gergely Nagy	Vác	Red	leaving at 17:05

**Tip:** Click on a green seat. An automated email will then be received by the driver. Until your request is accepted, the seat remains orange. It will then turn to red if okayed.

#### 4. RideSharing Platform Maps

An especially unique feature has been the ride-sharing [platform](#) which matches riders with drivers. On a virtual platform it lists those daily survey respondents who drove to work and are willing to share their car's space. The online booking system includes map-linked destinations and *details* any costs involved or route deviations.

The online booking system is linked to Outlook and utilises a colour code to indicate free (green) and booked (red) seats as well as reservations in progress (amber). Uniquely, potential passengers can mouse-over booked seats in order to see who will ride with whom, thereby gauging preferred company! A daily *email* one hour before COB reminds potential passengers of the spaces available while the online platform posts a daily medals-themed ranking to reveal the month's top ride sharers.



#### 5. Top ride-sharers chart

In 2015, **1,380** ride-shares occurred, with the three leading drivers contributing **537** rides. Winners were rewarded and congratulated via social media. But perhaps the greatest benefit to riders and drivers is that ride-sharing builds team spirit!

The toolkit is unique in comparison with more sophisticated and long-established ride-share services because it accumulates daily ride-share data over time. Thanks to its mapping of all other employees' travel modes, it allows company mobility managers to gauge whether planned measures have resulted in positive or negative modal shifts, enabling them to adapt their approaches to encouraging behavioural change. The tool also enables REC to champion its staff's health, environmental and financial performance via the [Internet](#).



**Jerome Simpson**  
@JeromeSimpson2

#### 14. Twitter congratulations

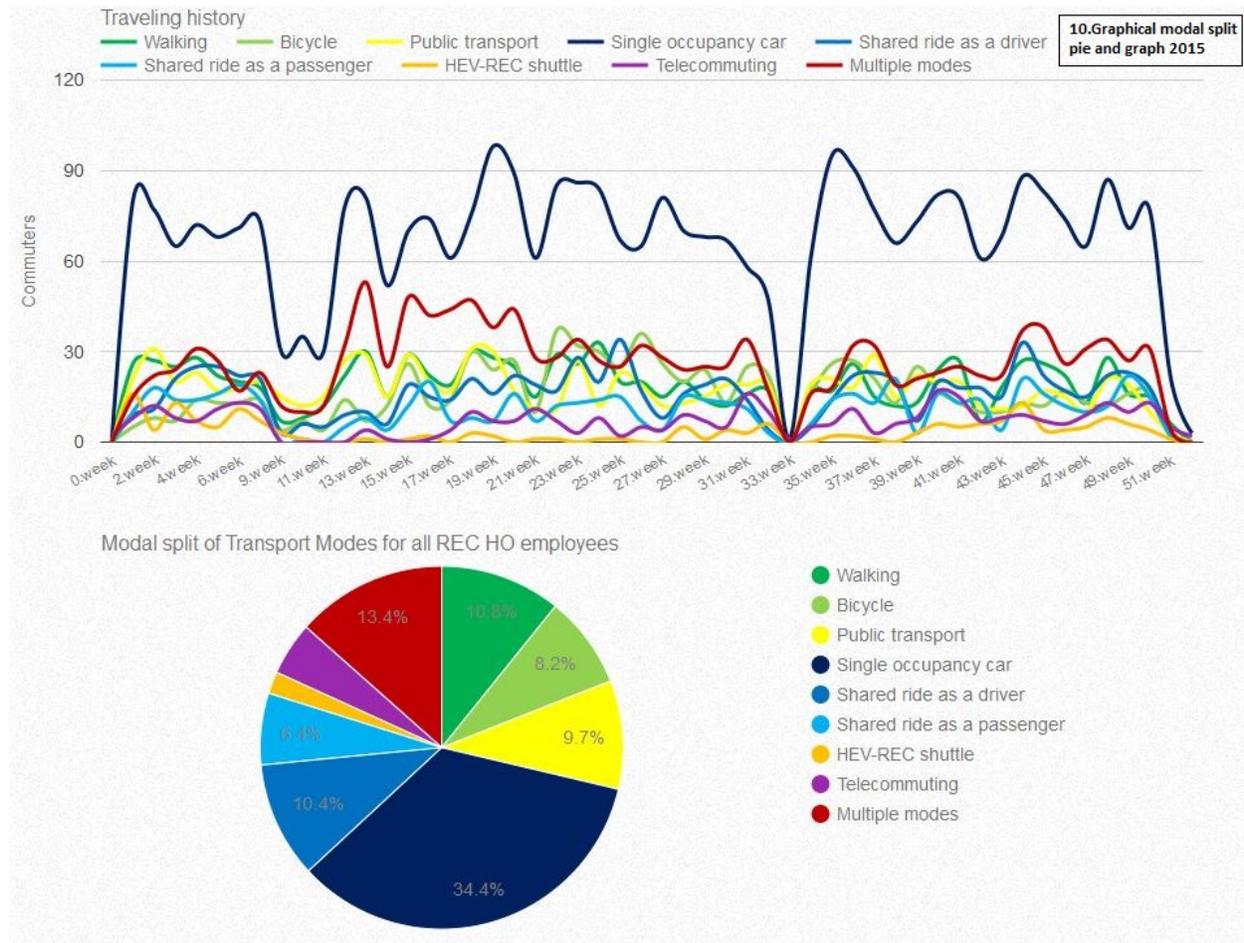
A big #ShoutOut to @RECstream's #top3 #rideshare-rs 'n' #teambuild-ers in #2015 [tmt.rec.org/carpool.php](http://tmt.rec.org/carpool.php) 🙌👍



6. Announcing the winners

### REC short summary

- Mandate to help “solve environmental problems in the region”
- 20 km north of Budapest, in a ‘bedroom community’ of 20,000
- 80 staff who often travel on mission, have flexible working hours & enjoy free parking. Its Budapest-based 50% are travel ‘subsidised’ (i.e. receive an income supplement)



7. Modal split

### Policy drafting

Aside from the technical innovation outlined above and REC’s mobility plan which integrates several further practical measures into a single strategy (i.e. bicycle facilities and a shuttle bus that functions as a public transport feeder service bringing staff to the suburban rail/regional bus inter-modal hub), our aim is to develop an internal policy on REC staff’s sustainable mobility. Among the key aims of this addition to our organisational handbook would be to:

- Encourage telecommuting (at least two times per week),
- Provide a framework on data collection and handling, including integration of REC’s performance data into the home page proper

- Financially motivate more active modes of travel (e.g. cycling, walking) either through i) cost reimbursement (especially for Szentendre-based expats) or ii) a carbon credit scheme where credits can be traded for cash annually based on monitoring data (motivating staff to complete the daily survey). *NB: the fund might be 'credited' by those who emit CO<sub>2</sub> – see travel allowance below*
- Integrate an introduction to REC's travel plan and how staff can benefit into the new staff induction process
- Priority parking for ride-sharers, alternatively fuelled vehicles
- Link the mobility policy to the performance evaluation scheme (e.g. Reward scheme for calories burned linked to the 'personal development' indicator on the grounds of healthier employees, or adopt daily survey completion into the annual 'compliance' personal performance indicator)
- Integrate the already existing set of general rules on ride-sharing (integrating user experiences) and the 'legitimacy' of charging for rides (e.g. model calculations per km)
- Personal travel planning services on how to get to/from REC (not only for new recruits)
- Update REC's transportation allowance such that it is only given upon completion of the daily survey (which ideally would be linked to crediting carbon fund)
- Reference REC's shuttle as the PT Feeder