

"Stone into still water"

- unexpected benefits of a BSS in Budapest

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WOCOMOCO
Warsaw



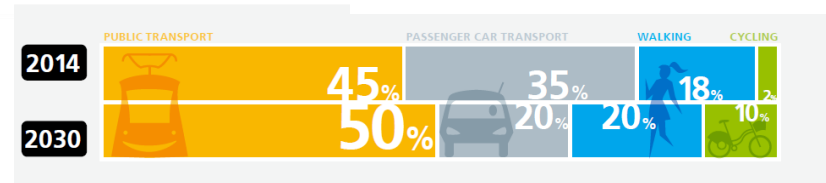


Photo: Krisztián Bódis

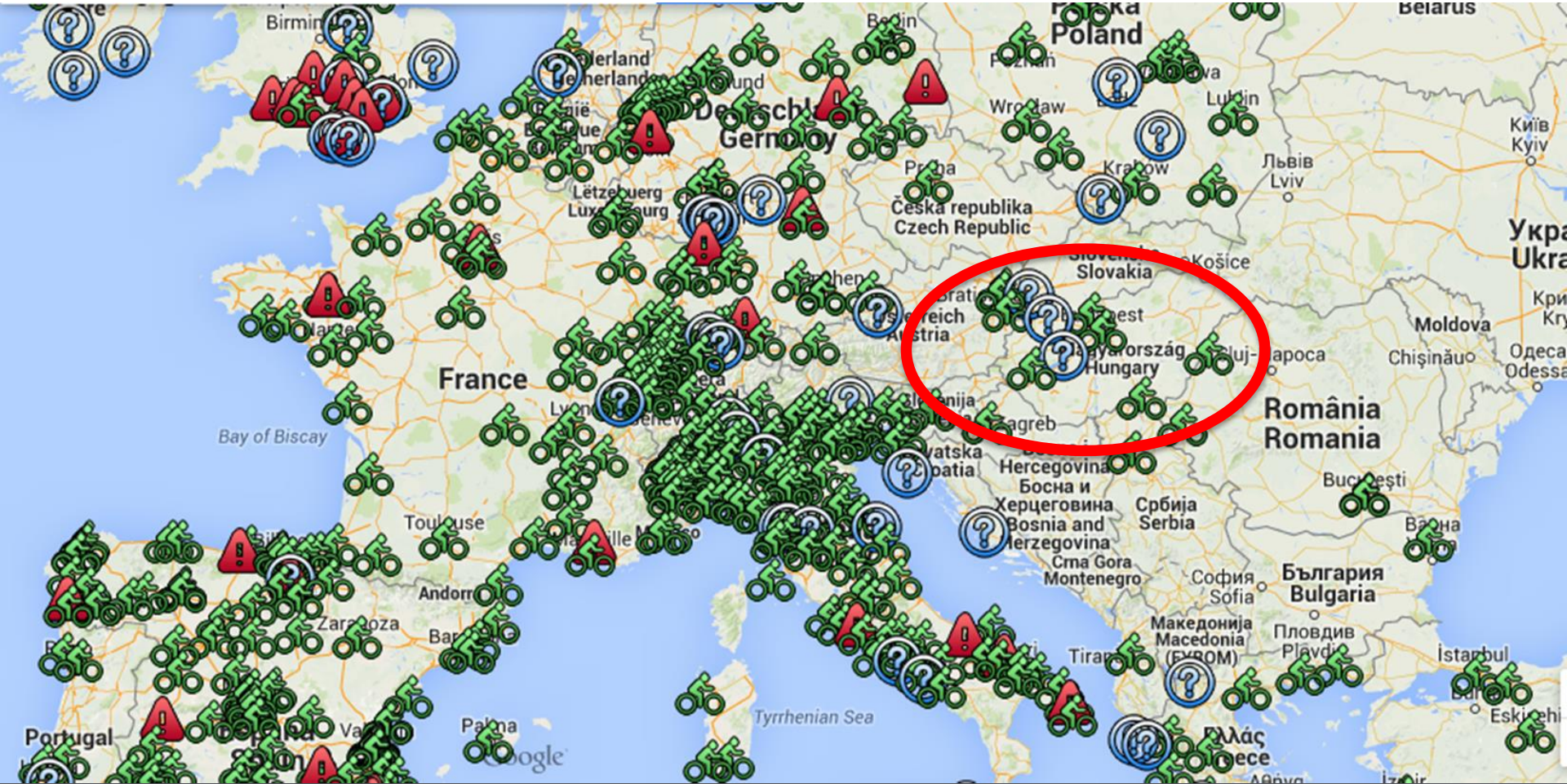
BKK Centre for Budapest Transport

Budapest – Capital of Hungary (since 1873)

- 525 km²
- 1,700,000 inhabitants – stagnating
- 600.000 car trips per day
- Complex geography and governance



Bike-sharing in Hungary



MOL "Bubi" (Budapest Bike)

- 20 km² service area
- 1150 bikes
- 99 docking stations
- Initial investment: 3.5 mEUR
- EU co-funding: 85 %
- Operation: ~ 1m EUR/year
- ~1200-1500 EUR/bike/year
- ~770 EUR/bike/year for taxpayers



4th generation features

- Smart bikes
- Board computer
- Various access channels
- GPS
- Electronic lock/
extra stand
- Solar panel
- Surveillance system
- Paypass
- Maintenance:
pedelec stringbike

Bérelj bringát gyorsan az új MOL Bubi applikáció beépített QR-kód-olvasójával

molbubi.bkk.hu

Google play App Store Windows Phone

BUDAPEST BKK BUDAPESTI KÖZLEKEDÉSI KÖZPONT MOL

Short history

2008	Concept
2009	Desk research
2009-2011	Market research/Feasibility studies
2011-2012	Information Days/Technical spec.
2013	Public procurement
2014 Jan-Apr	Implementation/Deployment
2014 Apr	Planned Launch
2014 Apr-Sep	Pilot test
8th Sep 2014	Launch
27th Oct 2015	1.000.000th trip
2015	Extension to 98 docking stations
2016	Extension to 112 docking stations



Operation model

Maintenance+redistribution **Közbringa Ltd.**

Operation control



Customer service



Revenues



IT services



Marketing-communication



Public Transport Integration

- Customer service
- Fare structure
- Signposting
- Passenger info
- Route planner
- Surveillance

- Transport policy
- Traffic management

- Branding
- Marketing
- Communication

- Legislation



Targeted marketing & communication



PT customer centres



Deák Ferenc tér

Public transport icons and numbers for Deák Ferenc tér:

- Metro (M) icon
- Yellow box: 1
- Blue box: 3
- Yellow box: 47
- Yellow box: 48
- Yellow box: 49
- Blue box: 9
- Blue box: 16
- Blue box: 105
- Red bus icon

Kossuth Lajos tér

Public transport icons and numbers for Kossuth Lajos tér:

- Bus icon
- Yellow box: 2
- Red box: 70
- Red box: 78
- Blue box: 15
- Blue box: 115
- Red bus icon

Batthyány tér

Public transport icons and numbers for Batthyány tér:

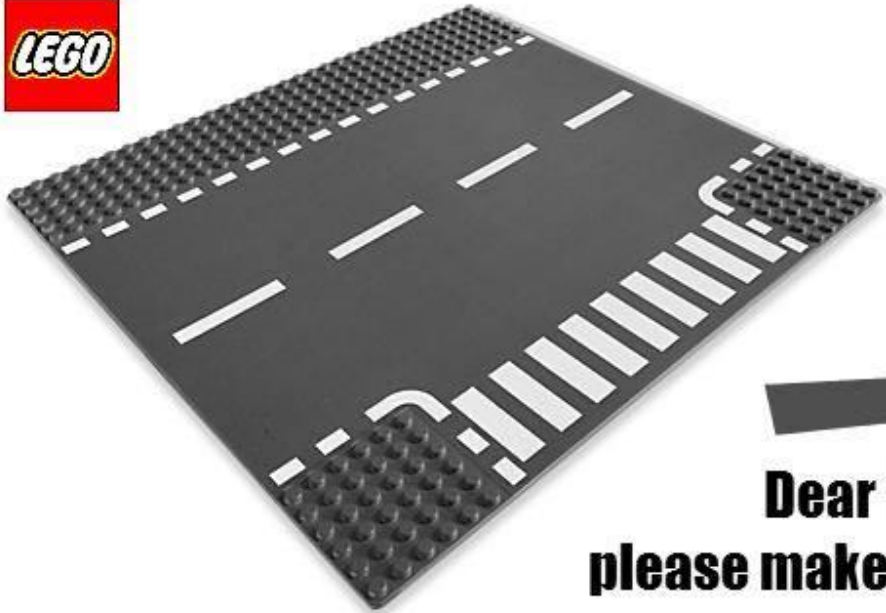
- Metro (M) icon
- Yellow box: 4
- Blue box: 10
- Blue box: 100
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- Touch screen
(terminal)
- Pinpad
(bike/terminal)
- RFID card
(bike/terminal)
- Smartphone app
(QR code on bike)

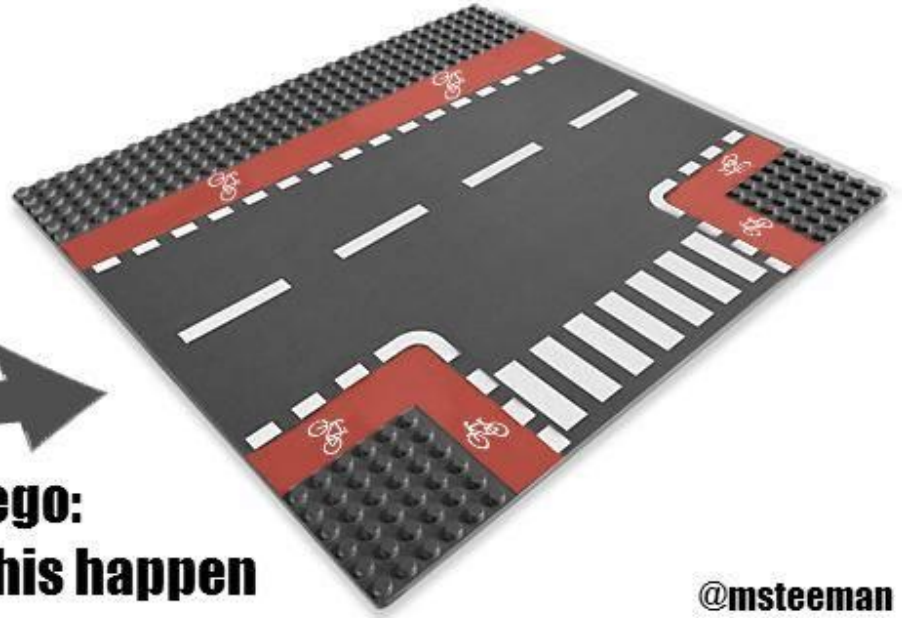




Opportunity for a livable city



**Dear Lego:
please make this happen**



@msteeman



Road space for cycling



Road space for New Mobility



Bike for all?



New Mobility



Mainstreaming!

W W W . S S V I D E O . I N T O R T . C O M



Mainstreaming urban cycling



Yuppies

- Attractive
- Running errands
- Lunch time
- Next to the office

Party people

A close-up photograph of a person's hand pouring a beer from a tap. The tap is a modern, cylindrical, metallic design. The background is a blurred, warm-toned night scene, likely a bar or restaurant, with bokeh lights from other patrons and fixtures.

- Social
- Fri/Sat night
- Access/egress
- Night schedule of PT
- Group use (4 people)



Students

- Fastest between campuses
- Access/egress to PT
- Exam period
- Substitute of PT for non-residents

Elderly

- Easy to use
- Re-engagement
- Accessibility
- Availability



Groups



Chic!



Social media...

...unprecedented
role models!

- 50K views!



Keeping the balance

www.vissintor.com



Share the road



Education without dangerizing

- „Nobody is a „cyclist”
- „Nobody is a „motorist”
- „We are all pedestrians”
- „We are all traffic”

- „Bike sharing is a safe transportation mode” (proved)

BRINGÁS TUDÁSTÁR

BIZTONSÁGOS KÖZLEKEDÉS
KERÉKPÁRRAL, MOL BUBIVAL



Járat Irány Indulás (perc)

17	Bécsi út / Vörösvári út	4'
17	Bécsi út / Vörösvári út	4'
Veszél 3 = 3		Portugália *** Labai

Szél Kálmán tér M

BUDAPEST BKK

Szél Kálmán tér

Minden perc értékes, ne töltsd végeztetés!

33 percet, hogy a válladon ne legyen a táskád súlya.

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Szél Kálmán tér

MOL BUBIZNI JÓ

PROBALJ KI MEGTÉVEZÉSRE!

AGOSTYON TITKA 26 ÉVES TANÁRNŐ

33 percet, hogy a válladon ne legyen a táskád súlya.

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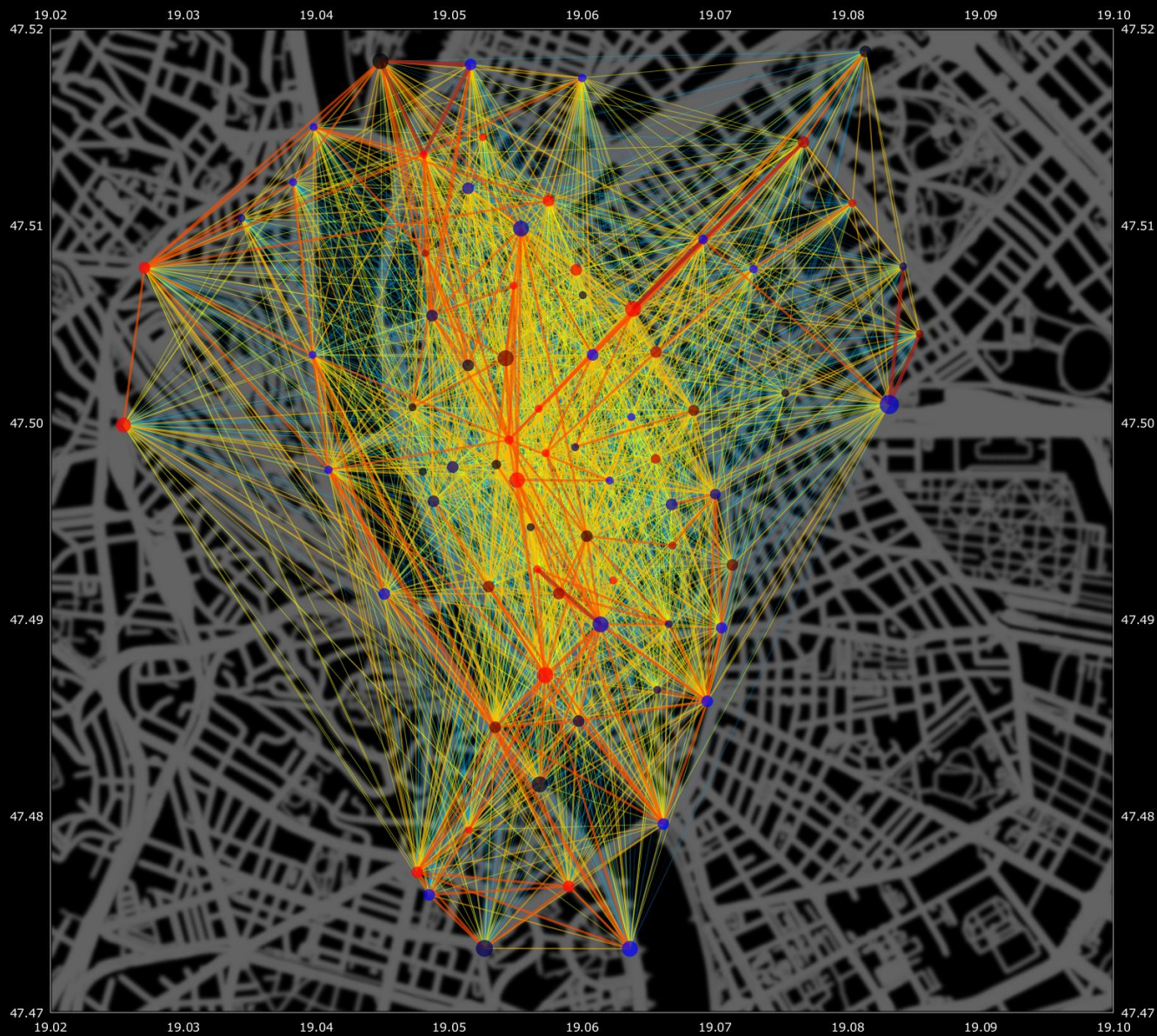
33 percet, hogy a válladon ne legyen a táskád súlya.

MOL BUDAPEST



Collaborative modal shift!





The routes taken by the users of MOL Bubi (the community bike sharing system of BKK in Budapest) between January and May 2015 collected as part of the MOL Bubi Challenge 2015 organized by MTA SZTAKI. The graph summarizes more than 130k individual bike trips between the 75 docking stations operating at the time. The bike hiring and returning data was made available in the context of the MOL Bubi Challenge 2015 along with the coordinates and capacities of the docking stations. The challenge aims to find the best prediction for the busiest routes and the demand at the stations. The author is participating at the Challenge as a member of a student group attending the Data Science course at Aquincum Institute of Technology. The analysis tools we used include awk, python and SQL language. The background texture is an artwork of the author that was inspired by a publicly available city plan (map data © OpenStreetMap contributors). Visualization was carried out with Inkscape and gnuplot.

Source: Marcell Stippinger

MOL Bubi Community T
 less frequent rou
 route of medium frequen
 more frequent rou
 docking station with 15 rad
 station with more hires than
 station with more returns th

Changing mindset



Thanks for your interest!



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