

MANAGEMENT CHALLENGES OF BUDAPEST ROAD NETWORK

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CEO

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 - Data publication - KAPU

Extended duties of Budapest Közút Zrt.

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Antecedent

Municipality General Meeting 1166/2015.(IX.30.) resolution

Rationalisation and reorganisation of not assigned public road management activities of BKK

Municipality General Meeting 33/2016.(I.27.) resolution

Transfer of public service tasks of road and transportation management to Budapest Közút from BKK

Tasks transferred to Budapest Közút Zrt

- operational road management activities,
- public services related to traffic
- road reconstruction services based on agreement with municipality
- renewal tasks related to public services involving or not involving subcontractor

Task transferred to Budapest Law Enforcement Directorate

- controlling actions

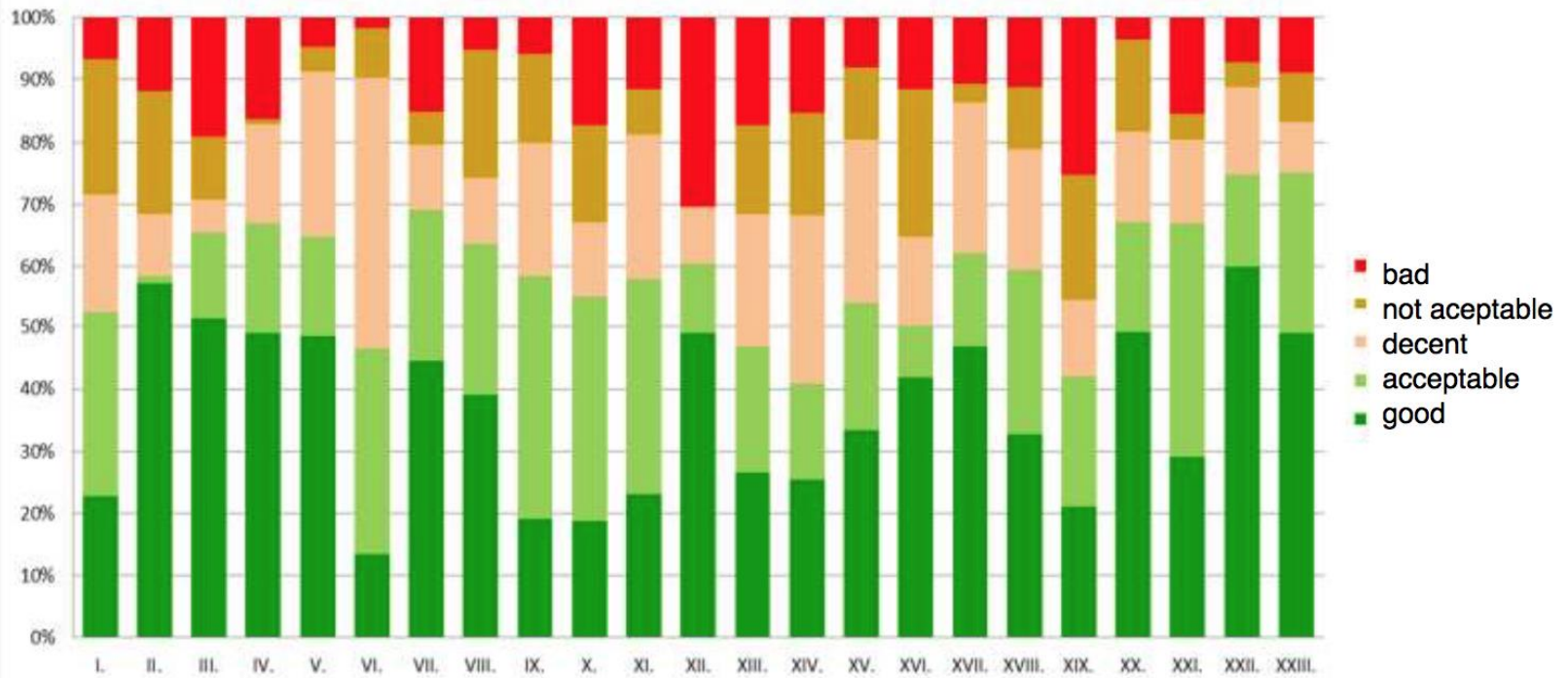
Road statistics

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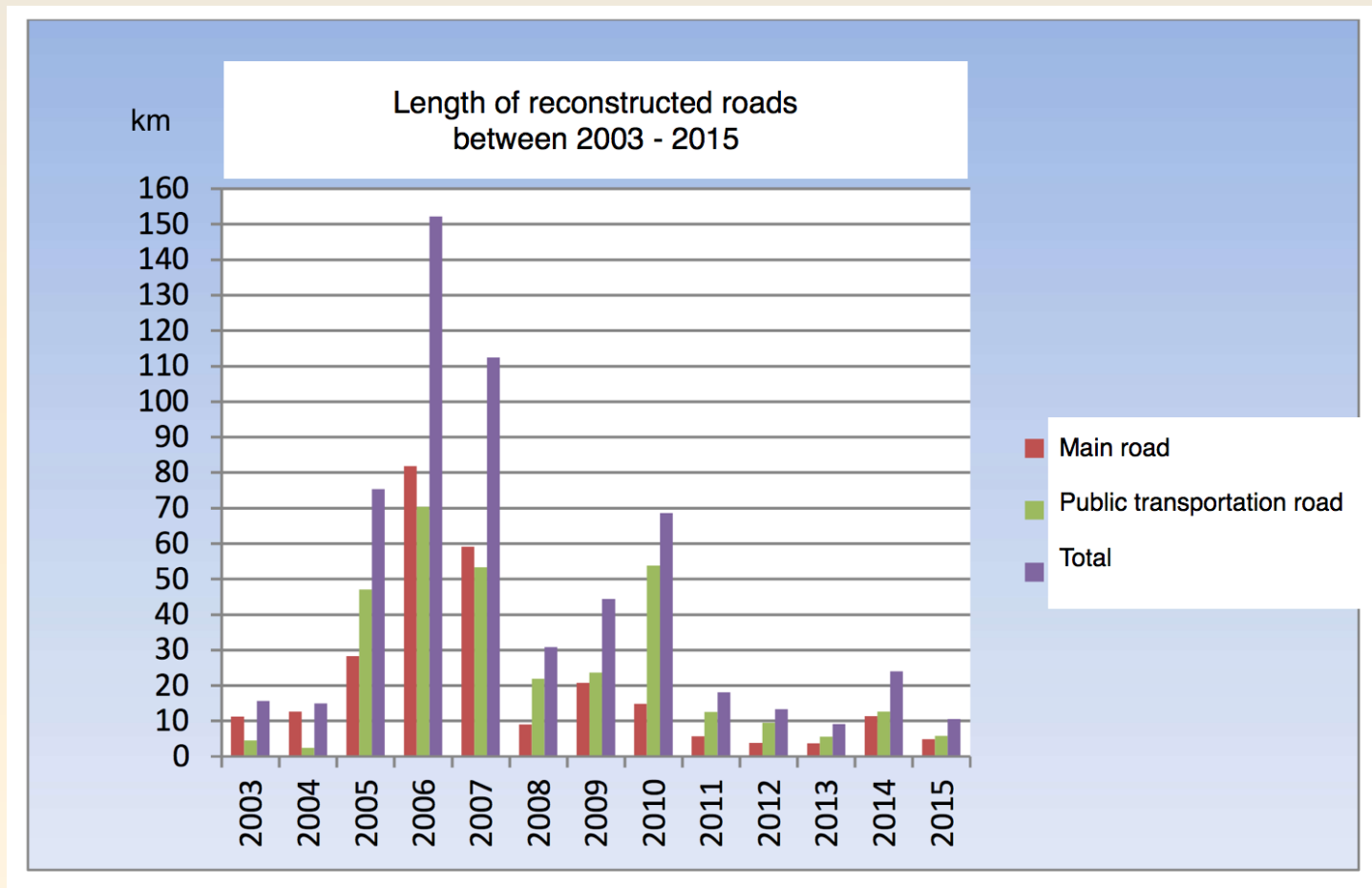
Public roads	included related bollards, noise absorbent barriers, drainage infrastructure and other assets
Main roads (owned by Budapest)	550 km (6. 271.034 m2)
Public transportation roads (roads owned by local municipality where public transportation operates)	537 km (4 474 769 m2)
Total:	1087 km (10 745 803 m2)
Bridges	
public road and pedestrian bridges	274
Danube bridges	13
Underpasses	75
stairs, gabions	100
Traffic management facility	
Traffic lamp junctions	1053
Traffic management centre	4
Traffic signs and poles	100 000
Road paintings	300 000 m2
Traffic camera	250

Road statistics

Road qualification based on lengths



Road statistics



Extended duties of Budapest Közút Zrt.

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Since 01.04.2016.

Public road manager



Operational road management and maintenance



Strategic road management



Extended duties of Budapest Közút Zrt.

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New duties assigned to Budapest Közút Zrt.

- **Operational road management** (operation approval, traffic management controlling, traffic design)
- **Taxi related public services** (taxi station building, maintenance, elimination, usage permissions, fee collection)
- **Public services for heavy vehicles**
- **Parking public services**
- **Road development activities**
 - Road reconstruction of 2012-2018. (1141/2016. (8.31.) Mun. Gen. Meeting res. - reconstruction of 20 roads);
 - Road reconstruction program preparation and design activities (1142/2016. (8.31.) Mun. Gen. Meeting res. - 55 street planning);
 - P+R parking place related development activities (1143/2016. (8.31.) Mun. Gen. Meeting res.);
 - Construction and preparation activities of Overpass and Road Furniture Reconstruction Program, 2011. (1144/2016. (8.31.) Mun. Gen. Meeting res.),

Budapest Közút Zrt. road construction works supported by Budapest Közút Zrt.

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Road reconstruction program /2012-2018/

Reconstructions of 20 streets (in co-operation with local municipalities) (budgeted: 4.115 million HUF)

Design

- 5 streets in-house by Budapest Közút Zrt.
- 15 street design is already finished

Construction

- 5 streets in-house construction by Budapest Közút Zrt.
- 15 streets construction done by contractor, managed by **Budapest Közút Zrt.**

Yearly road construction projects

Road design of 55 streets (in co-operation with local municipalities) between 2016-2017
Roll-out by Budapest Közút Zrt. in-house and with contractor

Quality assurance of road construction contracted by BKK Zrt. in

7 streets handed over

On-going projects

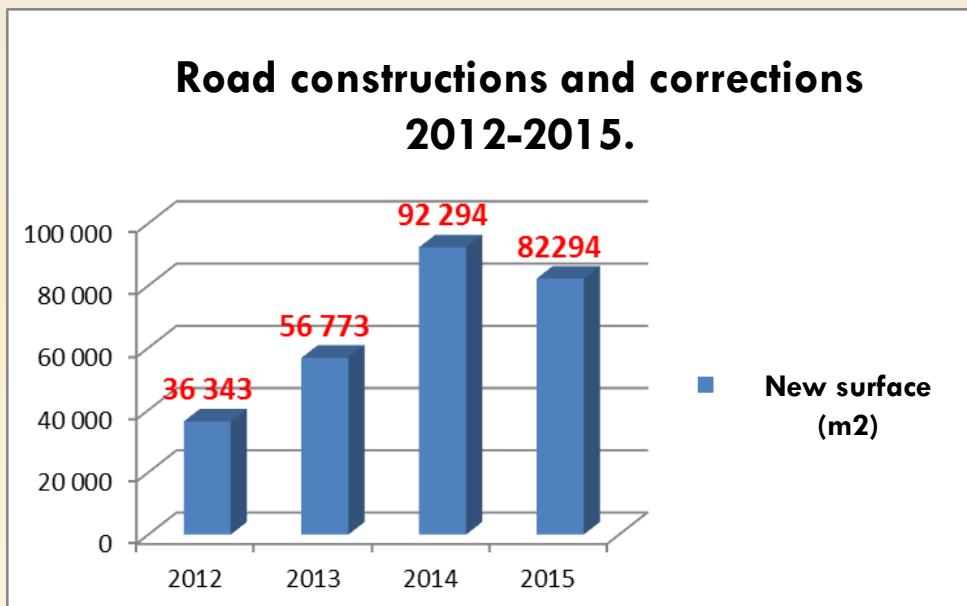
- X. Kápolna utca (liget tér – Kápolna tér)
- XI. Bocskai út
- XIII. Róbert Károly krt. (Árpád híd – Vágány utca)
- IX. Ferde utca and related junction



Budapest Közút Zrt. in-house road construction projects

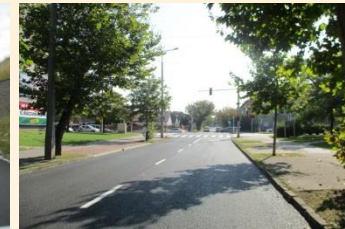
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In-house roll-put of large surface road reconstructions



2016.

- XVIII. Lőrinczi út
- XXIII. Rézöntő utca
- IV. Fiume utca
- XV. Epres sor
- III. Pók utca
- X. Kőbányai út – Máza tér
- XIII. Kárpát utca
- XIV. Erzsébet királyné úti végállomás
- II-XII. Budakeszi út – Szép Juhászné csp.
- XIII. Gyöngyösi út
- XVIII. Besence utca, Közdülő utca



European Transportation Congress 2017

09. June 2017.

BUDAPEST  KÖZÚT

Engineering surface works of M4 metro lines managed by Budapest Közút Zrt.

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After handover of Metro4 related traffic development works - M1-M7 highway junction



Engineering surface works of M4 metro lines managed by Budapest Közút Zrt.

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Metro3 reconstruction engineering tasks



Budapest Közút Zrt. Quality assurance under FINA development

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Reconstruction of Pesti alsó rakpart

(Dráva utca – Margit híd)

Client: Municipality of Budapest

Constructor: Enviroduna Kft.

Quality assurance: Budapest Közút Zrt.

Tender plan is finished.

Contractor selection is under process.

Pesti rakpart pedestrian passage and bike road

(Dráva utca – Dagály Uszodaközpont)

Built: 1.150 fm pedestrian passage and bike road

14.100 m² high quality pavement

Client: Municipality of Budapest

Constructor: Enviroduna Kft.

Quality assurance: Budapest Közút Zrt.

Contractor: Colas-Alterra Zrt.

Start: 12.10.2016.. **Finish:** 31.03.2017..

Pedestrian bridge (Above Rákospatak along the new pedestrian passage and bike road)

Client: BKK Zrt.

Constructor: Budapest Közút Zrt.

Quality assurance: Budapest Közút Zrt.

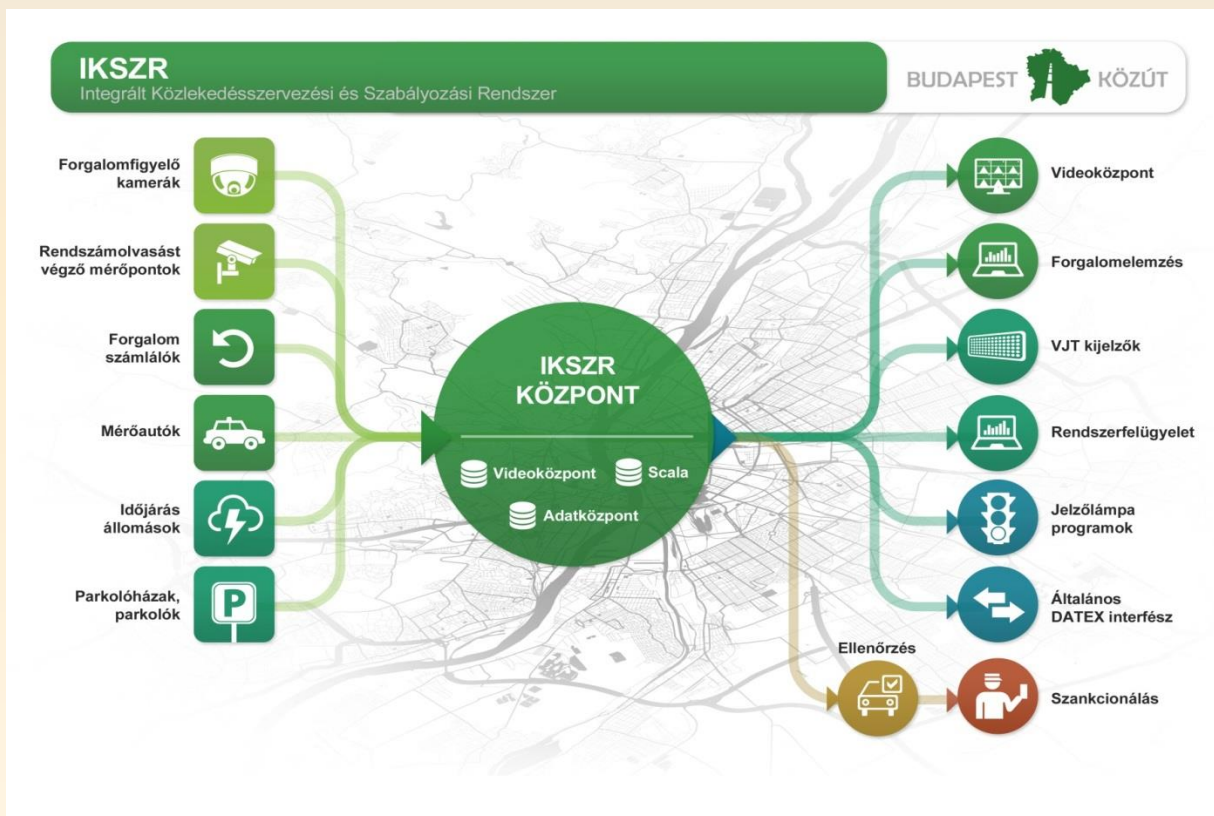
Construction plan finished.

Contractor selection is under process.

Traffic management developments

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IKSZR - Integrated Traffic Organisation and Regulation System

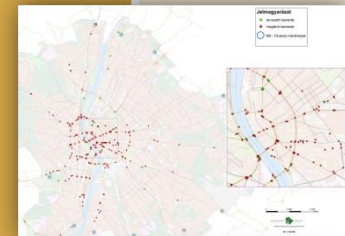


Traffic management developments

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Development fields

- Connecting nodes to centre to extend adaptive traffic management;
- Traffic depending control design and roll out in various places;
- Phasing line and field optimisation extend;
- Extension of Parking management system;
- Traffic monitoring activities functional extension and development
- Field infrastructure Extension of communication and data collection network;
- Traffic information services real-time services with real-time data



KARESZ

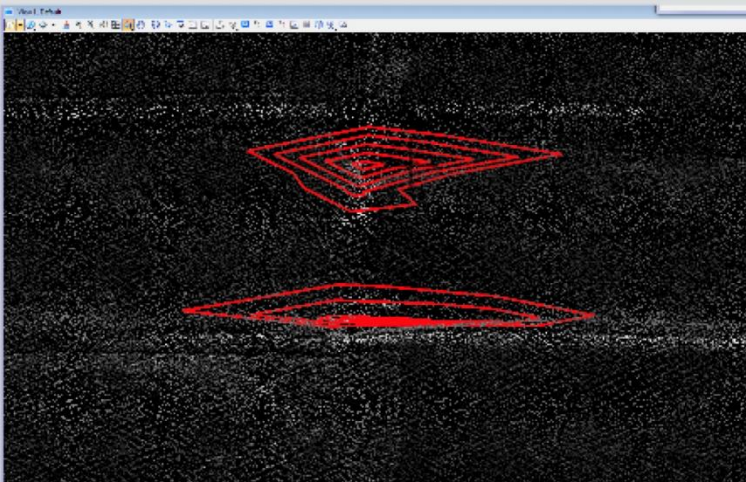
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On going

- Change detection (re-survey): 92% of managed roads by Budapest Közút
- Extended base utility data
- Update of junctions with traffic lights based on raster data
- Poller inventory
- Integration of 2016 orthophoto to KAPU

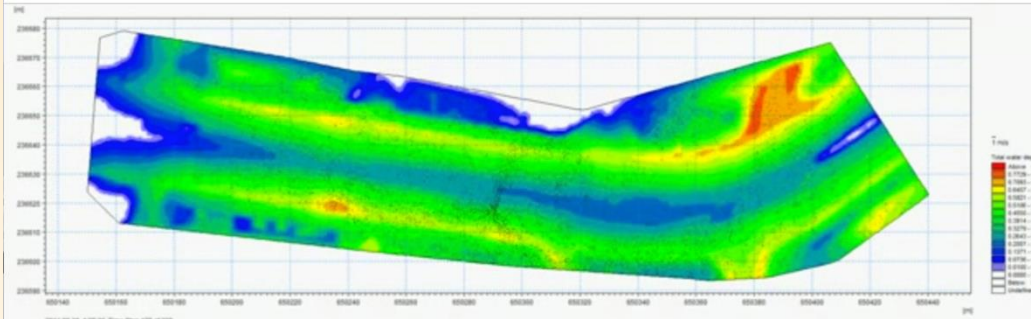


Analyst



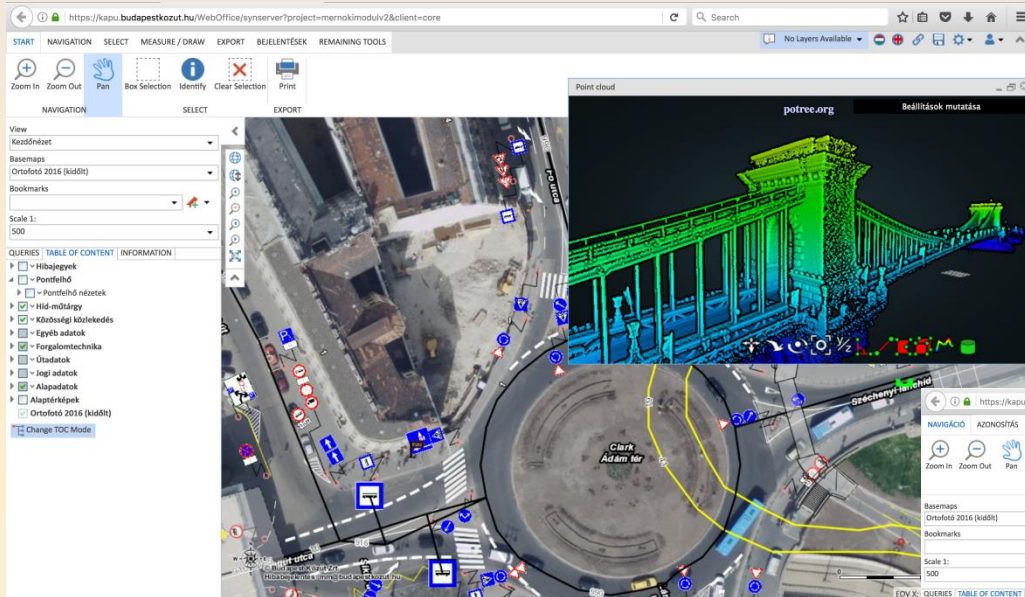
Automated surface error detection developed by Budapest Közút

High precision flood modelling using pointcloud data



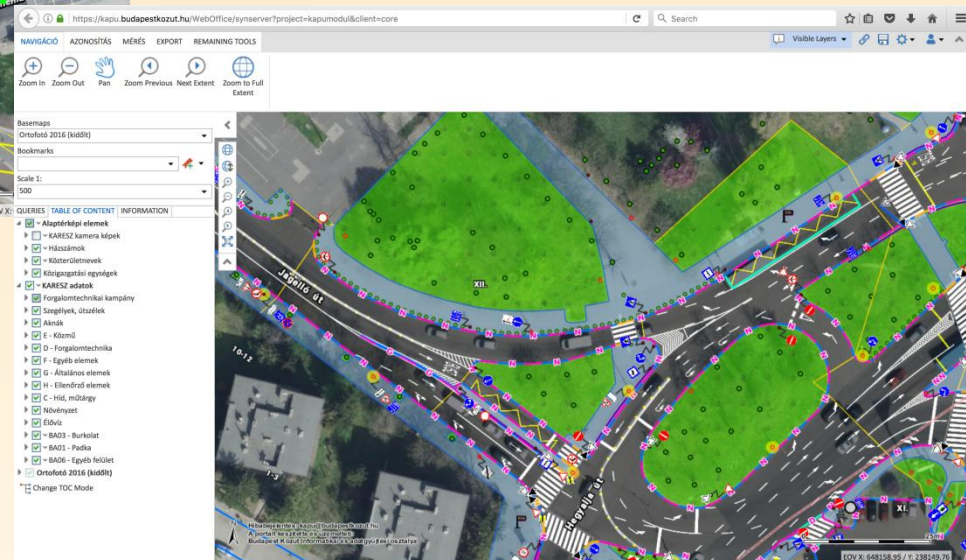
KAPU - on-line GIS data portal

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- 2D / 3D data publication
- All data available on-line
- Data export

- Custom portal for each fields
- External on-line GIS services



THANK YOU FOR YOUR ATTENTION!

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