

Transport Operation

Introduction of On-field Measurement 1

Safety Level Examination of Road Traffic

Miklós BÁNFI – banfi.miklos@mail.bme.hu – St 426

Schedule

Week	Date	Subject	Place
1	11 Sep	NO CLASS	
2	18 Sep	Introduction, editing requirements of reports	St 320
3	25 Sep	Presentation of on-field measurement 1 (Safety level)	St 320
4	2 Oct	(1) Safety level examination of road traffic	Road intersection
5	9 Oct	Presentation of on-field measurement 2 (Occupancy)	St 320
6	16 Oct	(2) Examination of public transport vehicle occupancy and time parameters	PT stops
7	23 Oct	National holiday - no class	
8	30 Oct	Presentation of on-field measurement 3 (Intersection)	St 320
9	6 Nov	(3) Traffic survey at a road intersection	Road intersection
10	13 Nov	Presentation of on-field measurement 4 (GPS)	St 320
11	20 Nov	(4) Examination of public transport circulation with GPS device	PT route
12	27 Nov	In-class exercise 1: Tram tachograph data analysis	St 320
13	4 Dec	In-class exercise 2: Rail line capacity analysis	St 320
14	11 Dec	Site visit / Consultation	

Editing requirements of reports

■ Front page

- See sample
- Time and place of measurement

■ Content

- Structure (goal and rating of measurement, original survey form)
- Tables (name, number, reference in text)
- Diagrams (name, number, reference, axes)



Budapest University of Technology and
Economics

Faculty of Transportation Engineering and Vehicle Engineering
Department of Transport Technology and Economics
BMEKOKUA176 – Transport Technology

4. Measurement

Examination of public transport circulation with
GPS device

Measuring time:
2014. November 12. 12:30 – 13:30

Measurement Location:
Tram line 2: Boráros Tér

Measurement carried out by:
Marina de Freitas Galvão (I3ADKX)
André Maia Pereira (IADOQB)

Measuring Group:
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Budapest, 2014. November 19

The PSION device



- Run the software by the **SafLev[A]** icon (press **Enter**)
- Enter data:
 - Actual date and time
 - Name of the measurer
 - Name of the intersection

A clipboard with a 'SMS Traffic Survey' form and a pen. The form is titled 'SMS Traffic Survey' and has a signature 'JGKNG' and 'fuking' written on it. The form includes fields for 'Date' (7 January 2009), 'Job No.' (2498), and 'Signature'. Below these are columns for vehicle types: 'Cars & Taxis', 'Light Goods', 'H.G.V. 2 Axle', 'H.G.V. 3a Rigid', 'H.G.V. 4a Rigid', 'H.G.V. 3a Artic', 'H.G.V. 4+ Artic', and 'Buses & Coaches'. The form is partially filled out with handwritten marks.

Use of the PSION device

- Under the Safety level label appears the **measurement counter**
- Number of persons in the vehicle (1-6) displayed on the screen (1 to 5 exact numbers and 6 is for ,more than 5')
7 – taxi 8 – bus
(if it was taxi or bus, there are no more questions)
- **Seatbelt?:**
 - Press ,0' if driver's seatbelt is *fasten (Yes)*
 - Press ,.' (next to the ,0') if it is *not fasten (No)*
- **Phone?:**
 - Press ,0' if the driver is *using his/her cellphone (Yes)*
 - Press ,.' if he/she is *not using his/her cellphone (No)*

The image shows a clipboard with a survey form titled "SMS Traffic Survey". The form is partially filled out. The date is "Tuesday - 27 January". The location is "3 A Main Road". The vehicle type is "Motor Cycles". The form also has a section for "Signature" and "H.O.V." (Home Office Vehicle) with checkboxes for "4+ Artic" and "Buses & Coaches".

Date	Location	Vehicle Type	Signature	H.O.V.
Tuesday - 27 January	3 A Main Road	Motor Cycles		<input type="checkbox"/> 4+ Artic <input type="checkbox"/> Buses & Coaches

Safety level examination of road traffic

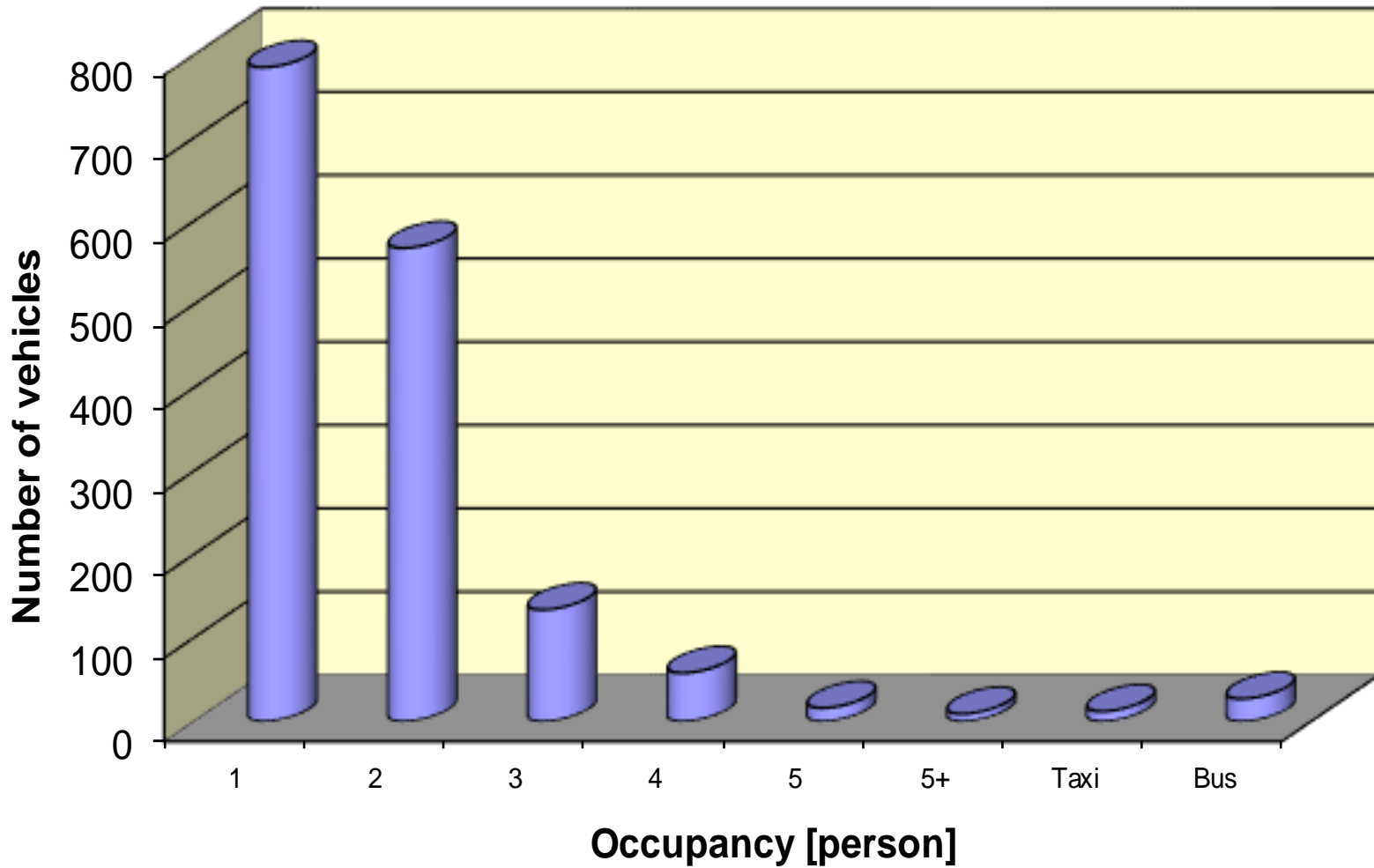
■ Calculated data:

- Average vehicle occupancy** – only for passenger cars (no taxi, no bus)
- Overall data table** (vehicle number depending on occupancy, percentage, row total, etc.)

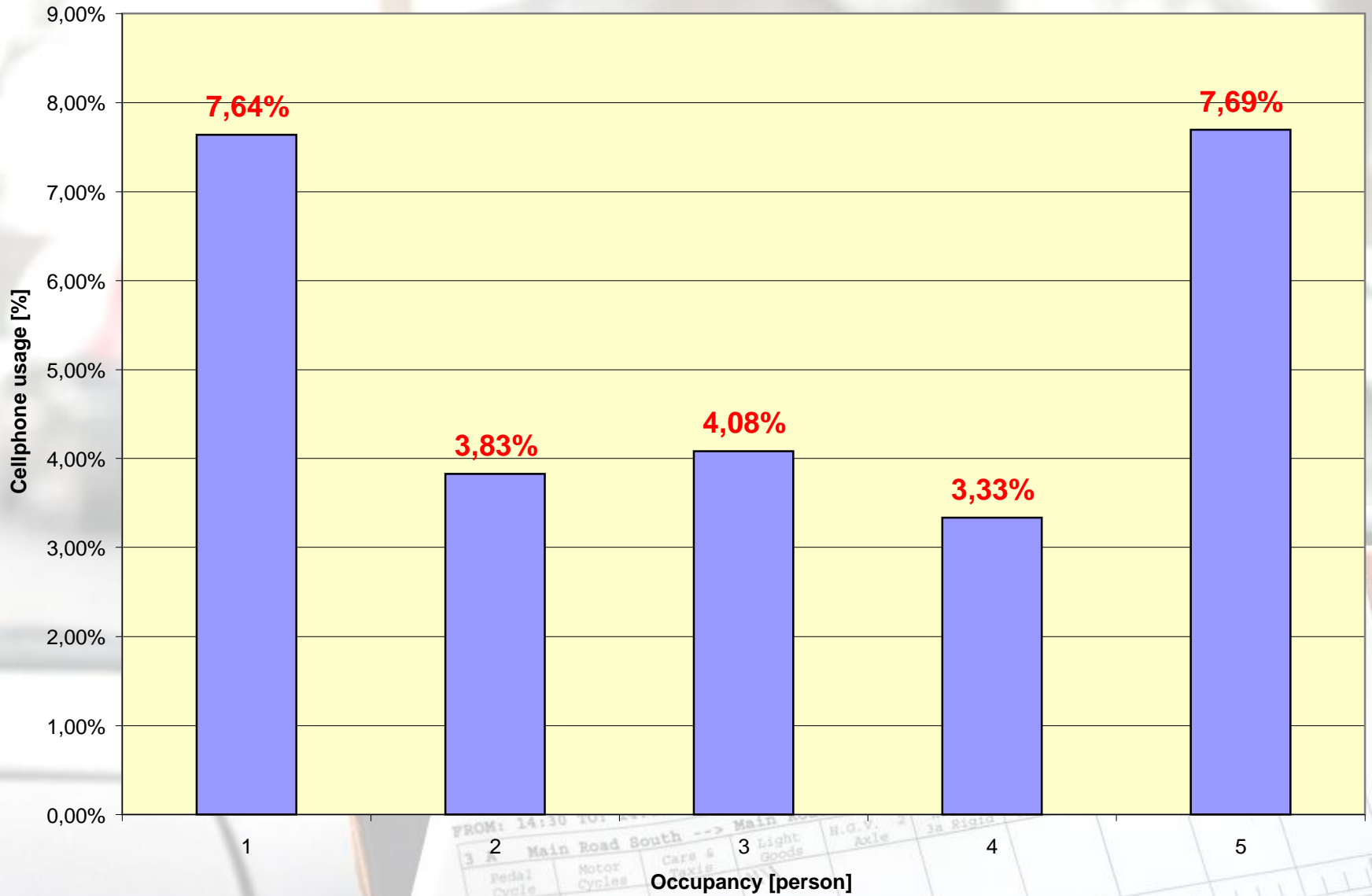
■ Diagrams:

- At least 3 diagrams!
- Diagrams should contain at least 4-5 data rows (e.g. correlation of seatbelt and cellphone usage)
- Coloured diagrams: use different colours!
- Monochrome diagrams: use different fill pattern!

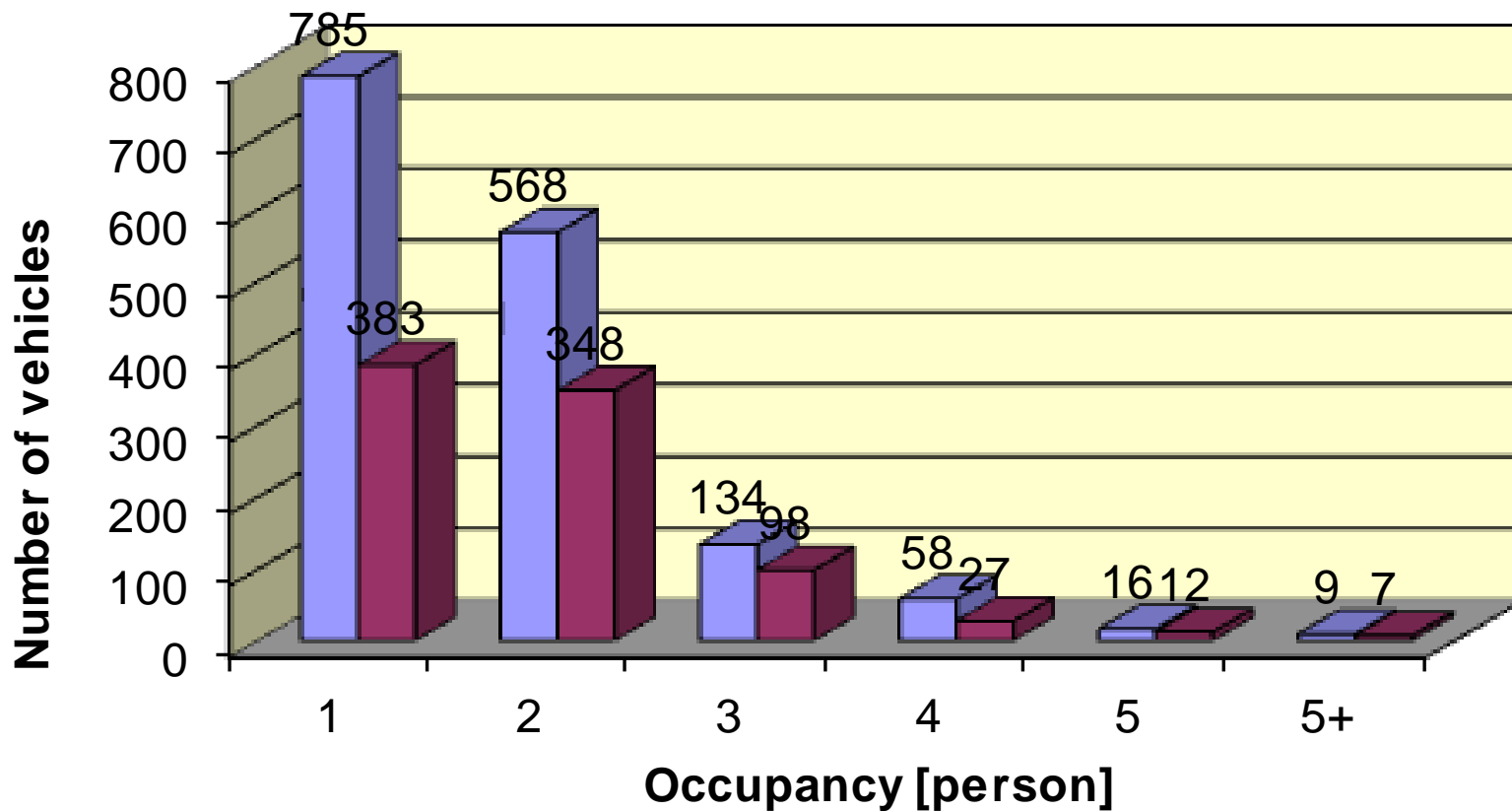
Vehicle occupancy



Cellphone usage



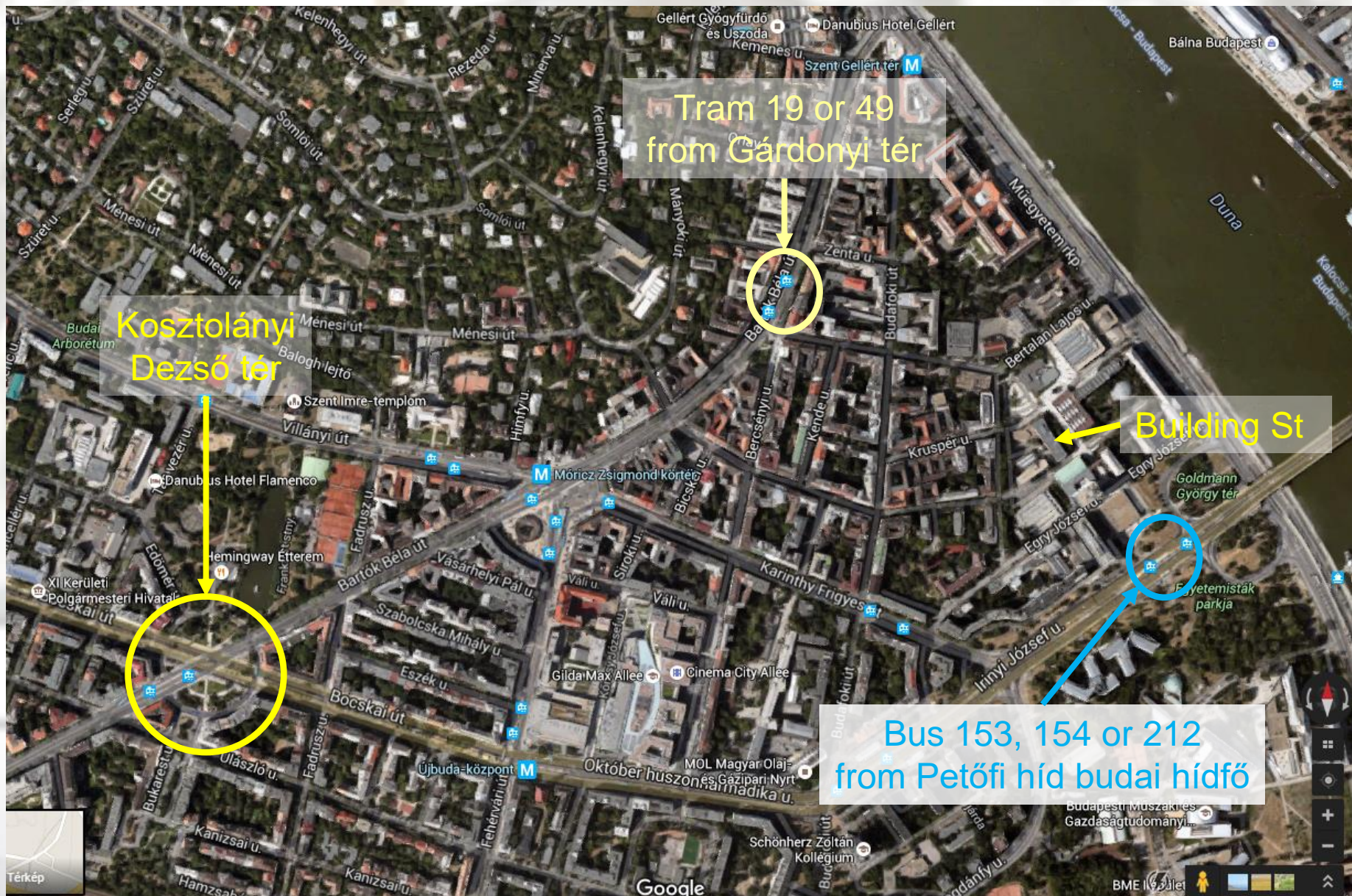
Seatbelt usage



■ Total

■ Seatbelt fastened

Kosztolányi Dezső tér



Kosztolányi Dezső tér



Safety level examination of road traffic

- Students should form pairs
 - Send an e-mail to banfi.miklos@mail.bme.hu
 - names and NEPTUN codes of the pair
 - Cc to pair's e-mail address (so both e-mail address will be revealed)
 - **before 27 Sept 2PM**
 - Assignment will be announced on the next lecture (30 Sept)
- Picking up PSION device:
On the Tuesday before the measurement (1 Oct) between 9:30AM and 3:30PM (only for the earlier shifts)
- The measured data will be sent via e-mail

The background image shows a clipboard with a traffic survey form. The form is titled 'Traffic Survey' and includes fields for 'Date', 'Time', 'Job No.', and 'Location'. The location is 'Main Road North'. The time is 'FROM: 14:30 TO: 14:45'. The form is divided into columns for different vehicle types: Pedal Cycle, Motor Cycles, Cars & Taxis, Light Goods, H.G.V. 2 Axle, H.G.V. 3a Rigid, H.G.V. 4a Rigid, H.G.V. 3a Artic, H.G.V. 4+ Artic, and Buses & Coaches. There are handwritten notes and a signature on the form.

FROM: 14:30 TO: 14:45		Main Road North		H.G.V. 2 Axle	H.G.V. 3a Rigid	H.G.V. 4a Rigid	H.G.V. 3a Artic	H.G.V. 4+ Artic	Buses & Coaches
Pedal Cycle	Motor Cycles	Cars & Taxis	Light Goods						

Thank you for your attention!

SMS Traffic Survey

Station No. _____ Date Tuesday - 27 January 2009 Job No. 2498 Signature *JGKNG*

FROM: 14:30 TO: 14:45

3 A Main Road South --> Main Road North

Pedal Cycle	Motor Cycles	Cars & Taxis	Light Goods	H.G.V. 2 Axle	H.G.V. 3a Rigid	H.G.V. 4a Rigid	H.G.V. 3a Artic	H.G.V. 4+ Artic	Buses & Coaches

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	H.G.V. 2 Axle	H.G.V. 3a Rigid	H.G.V. 4a Rigid	H.G.V. 3a Artic	H.G.V. 4+ Artic	Buses & Coaches