Information redesign

Team members:
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Daniel Kotsjuba
Ivari Lipp
Hardi Niilo
Our approach to the project:

- realistic budget calculations
- strict preexisting infrastructural conditions
- less grandiose, more usable to Tallinn City Transport.
Focused on 5 elements of the bus stop area that we as graphic designers could work on.
1) Restructuring of the information panel
2) Legibility of transport timetables.
3) Additional labeling of bus stops
4) Visual identification of accessible buses
5) Ideal infrastructure for bus shelters
### Relations between the project parts

<table>
<thead>
<tr>
<th>Bus stop</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timetables</strong></td>
<td><strong>Stickers</strong></td>
</tr>
<tr>
<td><strong>Map</strong></td>
<td><strong>Vehicle exterior</strong></td>
</tr>
<tr>
<td><strong>Information panel</strong></td>
<td><strong>Identification</strong></td>
</tr>
<tr>
<td><strong>Led display</strong></td>
<td><strong>Web</strong></td>
</tr>
<tr>
<td><strong>Bus stop signage</strong></td>
<td><strong>Tickets</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Font</th>
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<tbody>
<tr>
<td>Language</td>
<td>Language</td>
</tr>
<tr>
<td>Advertising</td>
<td>Advertising</td>
</tr>
<tr>
<td>Pictograms</td>
<td>Pictograms</td>
</tr>
<tr>
<td>Route</td>
<td>Route</td>
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<tr>
<td>Color of transp.</td>
<td>Color of transp.</td>
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<tr>
<td>Ticket info</td>
<td>Ticket info</td>
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<tr>
<td>Stop naming</td>
<td>Stop naming</td>
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<tr>
<td>Access. signage</td>
<td>Access. signage</td>
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<tr>
<td>Stickers</td>
<td>Stickers</td>
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<tr>
<td>Sõidugraafik</td>
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<tr>
<td>Color categories</td>
<td>Color categories</td>
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<tr>
<td>Map</td>
<td>Map</td>
</tr>
<tr>
<td>Bus stop labels</td>
<td></td>
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</tbody>
</table>
Information panel
Creating a system
Reisisadam (D-terminal)
Transportation map
New map
Train stops are equally important.

Bus stop info is organized into modules.

Different types of transportation are highlighted.

Bus stop markings indicate if the stop covers different types of transportation.

Different types of transportation are drawn side by side.
Complex part of the new map
Bus timetables
Old timetables

> 10m?
Old timetables
Old timetables
New timetables
New timetables / detail

<table>
<thead>
<tr>
<th>Type of Transportation</th>
<th>Workdays as Timespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts to be Passed</td>
<td>Stops Remaining, Current Stop in Bold</td>
</tr>
<tr>
<td>Stops and Buses</td>
<td>Additional Info About Stops and Buses</td>
</tr>
</tbody>
</table>

**Männiku - Metsakooli**

<table>
<thead>
<tr>
<th>Esmaspäev - Reede</th>
<th>Laupäev</th>
<th>Pühapäev</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 19 40 54</td>
<td>05 30 50</td>
<td>06 53 44</td>
</tr>
<tr>
<td>06 05 15 27 38 48 56</td>
<td>06 10 28 46</td>
<td>07 17 28 45</td>
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<tr>
<td>07 05 14 22 30 38 48</td>
<td>07 04 22 40 55</td>
<td>07 02 23 44</td>
</tr>
<tr>
<td>08 08 18 28 39 49</td>
<td>08 10 24 36 52</td>
<td>08 06 21 41</td>
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<tr>
<td>09 09 14 27 40 53</td>
<td>09 06 20 35 50</td>
<td>09 02 23 44</td>
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<tr>
<td>10 10 06 19 32 45</td>
<td>10 05 19 33 46</td>
<td>10 01 29 50</td>
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<tr>
<td>11 11 00 15 30 45</td>
<td>11 01 18 35 49</td>
<td>11 06 32 50</td>
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<tr>
<td>12 12 00 14 29 45</td>
<td>12 03 18 33 46 58</td>
<td>12 13 30 55</td>
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<tr>
<td>13 13 01 17 32 46 58</td>
<td>13 11 24 37 50</td>
<td>13 08 29 47</td>
</tr>
<tr>
<td>14 14 10 23 36 49 59</td>
<td>14 04 18 31 45 59</td>
<td>14 12 23 41</td>
</tr>
<tr>
<td>15 15 09 18 26 35 43 51</td>
<td>15 13 26 39 52</td>
<td>15 05 35 56 59</td>
</tr>
<tr>
<td>16 16 07 16 24 33 43 54</td>
<td>16 06 20 34 48</td>
<td>16 17 41</td>
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<tr>
<td>17 17 05 16 27 39 51</td>
<td>17 03 18 33 51</td>
<td>17 17 15 27</td>
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<tr>
<td>18 18 03 15 27 40 52</td>
<td>18 11 31 53</td>
<td>18 03 33 55 40 52</td>
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<td>19 19 09 20 36 56</td>
<td>19 15 38 58</td>
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<td>20 20 16 36 56</td>
<td>20 18 38 59</td>
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<td>21 21 16 36 56</td>
<td>21 20 41</td>
<td>21 01 28 51</td>
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<tr>
<td>22 22 21 46</td>
<td>22 02 25 50</td>
<td>22 06</td>
</tr>
<tr>
<td>23 23 12 34</td>
<td>23 16 40</td>
<td>23 17</td>
</tr>
</tbody>
</table>

**additional info about stops and busses**

- Madalapõhjaline buss
- Kõrge platvormiga peatus

**Additional Info (Phone)**

- Tallinna Autobusskoondise AS
  - Tel: +372 650 9530
  - Email: tta@tallinnlv.ee
Bus stop signage
Bus stop without signage
Bus stop with the new signage
**Bus stop signage**

<table>
<thead>
<tr>
<th>Route</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Kunstiaakadeemia</td>
</tr>
<tr>
<td>13</td>
<td>Selli</td>
</tr>
<tr>
<td>20</td>
<td>Reisisadam (D-terminal)</td>
</tr>
<tr>
<td>20A</td>
<td>Kunstiaakadeemia</td>
</tr>
<tr>
<td>28</td>
<td>Veerenni</td>
</tr>
<tr>
<td>2</td>
<td>Estonia</td>
</tr>
</tbody>
</table>

- Typeface “Interstate”, needs little space, also legible in small sizes, at the same time preserving aesthetics
- Typeface is unified throughout the transportation system
- Same design principles should be used systematically
Visual identification of accessible buses
A bus without identification
Accessible bus identification

• For the mothers, the elderly, and the physically impaired
• For locals and tourists
• Makes particular buses visible among others
• Makes particular doors visible among others
• Unifies and clarifies bus timetables (better association between bus schedules and buses)
Accessible bus identification
Accessible bus identification
Bus shelter infrastructure
In research we found:

- Standards do exist for the bus shelter infrastructure
- These standards aren’t enough for wheelchair users
- These standards are often overlooked!
At least 2 meters of free space is required for a wheelchair user to maneuver.
Bus stop infrastructure

2 meters minimum
Space can be freed up by using open ended pavilions
Bus stop infrastructure

In narrow spaces use pavilions with no side panels.

- Side panels: 0.5 meters
- No side panels: 2 meters

In narrow spaces use pavilions with no side panels.
Bus stop infrastructure

6 meters maximum
To keep the integrity of the stop, maximum distance should not exceed 6 meters.
Proposal for tactile marker configuration
Proposal for tactile marker configuration

Tactile markers near bus shelters for visually impaired people.
Proposal for tactile marker configuration

The bus always stops at the sign
Proposal for tactile marker configuration

Front door aligns with tactile island
To make use of the tactile marking it needs to be placed systematically, thus forming a recognizable module.
Proposal for tactile marker configuration

Aligned
Conclusion:

• Unlike in other countries, accessibility guidelines are not mandatory in Estonia

• Systematic approach is the key!
For further inquiries:

norman.orro@gmail.com
A PLEASANT RIDE FOR ALL

RE-DESIGN OF THE SIGNAGE
OF TALLINN PUBLIC TRANSPORTATION
OUR RESEARCH

• Studying documents and regulations, mapping the main problems
• Reasearching on public transportation etiquette
• Documenting and mapping the signage in the buses
• Consulting main problems with TAK

We also studied the successful visual solutions of other cities (London, Helsinki, Saint Etienne)
THE MAIN PROBLEM: LACK OF INFO ACCESSIBILITY

- **Visual clutter** in the bus interior
- **Disorganised and unplanned** placement of signage
- **Unclear colour system**
- **Constant need of new signage**, and irregular solutions to this problem
- **Bus drivers’ arbitrary design decisions**

There are written regulations for the bus signage system, but are not followed in general.
VISUAL CLUTTER
VISUAL CLUTTER
OUR SOLUTION: CREATING A NEW FULLY ACCESSIBLE SIGNAGE SYSTEM

• Simplifying the process of placement and production
• Creating a new color system more recognisable for passengers
• Updating pictograms based on international standards
MAIN DESIGN IDEAS

- **4 main colours** (mandatory blue, safety green, fire safety red, warning yellow)
- **square based system**
- **better legibility**
- **Interstate** → internationally approved signage typeface
- **more visual** communication

Our system tries to equally serve the needs of a passenger, transportation worker and printworker
**COLOUR SYSTEM**

- **Mandatory blue:** bus etiquette, ticket information, informing
- **Safety green:** location of safety equipment, emergency behaviour, safety information, calming
- **Fire safety red:** position of fire equipment, easily noticeable
- **Warning yellow:** potential danger or dangerous behaviour, attention
COLOUR SYSTEM

• **4** main colours
• **for passengers** rather than print workers
• **easy to locate** the suggested activity
• **recognisable from a distance**
• **helps** to evoke certain way of acting (calm, quick, attentive, informed)
• **communicates visually** with children, tourists, elderly people
LAYOUT SYSTEM

- square based (75mm)
- element sizes: micro, normal, macro
- modular elements → easier to produce new additional signage
- easy to combine → less visual clutter
PICTOGRAM SYSTEM

• **less textual**, more visual information
• **better communication** with tourists, children, visually impaired
• **improved legibility** → white graphics on colour (ex. black on yellow)
NAVIGATION SYSTEM

- arrows and pictograms separated
- signage fits to all bus types (old, new)
- easy to locate the suggested activity
- easier placement of signage
• **tested**: based on the signage on highways
• **clean, simple and easy** on the eyes
• **cut angles and open counters increase legibility** (and accessibility)
• **wide variety** of weights
COLOUR + LAYOUT + ICONS + TYPE = PROTOTYPES
MOBILITY IMPAIRED ACCESS
MOBILITY IMPAIRED ACCESS
MOBILITY IMPAIRED ACCESS
PRIORITY SEATS
PRIORITY SEATS
PRIORITY SEATS

Before ↑

After ↑
TICKET INFORMATION

Sõidu ajal piletide ei müüda
TICKETS SOLD DURING STOPS ONLY

Palun leidke täpne raha
PLEASE USE EXACT CHANGE

Piletita sõidu eest
trahv kuni 40€
FINE UP TO 40€ FOR NOT HAVING A TICKET
TICKET INFORMATION

Pilet
TICKET
1.60€

Sooduspilet
DISCOUNT TICKET
0.83€

Sõidu ajal pileteid ei müüda
TICKETS SOLD DURING STOPS ONLY

Palun leidke täpne raha
PLEASE USE EXACT CHANGE
Ekspresspilet 1.60€
EXPRESS TICKET

Lisapilet 0.83€
SUPPLEMENTARY TICKET

Sõidu ajal pileteid ei müüda
TICKETS SOLD DURING STOPS ONLY

Palun leidke täpne raha
PLEASE USE EXACT CHANGE
SAFE NAVIGATION

Väljumiseks vajutage nuppu või liikuge enne peatust ukse juurde

TO EXIT PRESS BUTTON OR STAND BY DOOR
SAFE NAVIGATION

Ära takista teiste reisijate liikumist
MAKE WAY FOR OTHER PASSENGERS
SAFE TRAFFIC

Anna teed
SAFE TRAFFIC

Before ↑

After ↑
FIRE SAFETY

Tulekustuti asub bussijuhi juures
FIRE EXTINGUISHER IS LOCATED BY DRIVER
FIRE SAFETY
EMERGENCY BEHAVIOUR

Before ↑

After ↑
EMERGENCY BEHAVIOUR

Avarii korral eemalda kaas, vajuta nuppu ja ava uksed käsitsi

IN CASE OF EMERGENCY REMOVE GLASS, PRESS BUTTON AND OPEN DOORS BY HAND
Avarii korral pööra kangi ja ava uksed käsitsi
IN CASE OF EMERGENCY TURN LEVER AND OPEN DOORS BY HAND
Ära varja bussijuhi vaatevälja paremale
KEEP THE DRIVER'S VIEW OPEN
WARNING SIGNS

Uksed avanevad sissepoole

DOORS OPEN TOWARDS YOU
OUR SPECIAL THANKS TO:

• Tallinn Bus Company (TAK), Sirje Roht
• Tallinn Department of Transportation (TTA)
• The Estonian Chambre of Disabled People
• Etiquette advisors Maaja Kallaste, Tiina Tšatšua
THANK YOU!