

Title:

Double amount of students and staff, no extra parking places and a green campus: that's BUAs's challenge for our new campus



Contribution of BUAs (Breda University of Applied Sciences, the Netherlands) to the Contest of Best Practices on Sustainable Mobility at Universities (UMOB contest). Until September 2019 BUAs was known as NHTV.

Breda (NL), 30.1.2019

Contribution of:

- University: Breda University of Applied Sciences (BUAs, former NHTV)
- Location: Breda, the Netherlands
- BUAs in short: some 8,000 students from over 100 countries are studying at our international higher education institute. It is situated in the south of the Netherlands, in the city of Breda. We (our staff of 800 involved people) prepare students for management-level positions in an international setting



Vision and background: How can our University campus contribute to the liveability of the neighborhood and the city of Breda?

- Due to growing mobility numbers and a growing population, cities are facing a major challenge: How can cities stay or become accessible but on the same time also liveable? To date, it is mainly up to policy makers and urban planners to think about these challenges. In September 2019, the new campus of the NHTV university of applied sciences will be completed: there will only be one location for all students and staff. This offers opportunities to contribute to solutions in a new way of working (together). Currently, NHTV consists of four locations.
- Our **new and green campus** is partly ready. September 2019 all 4 faculties, now sprawled over the city, will be centralized on this new campus. This campus is located near the center of student city Breda. On campus there will be offered many opportunities for meeting people and to get inspired. The city itself is fun, safe and internationally oriented. Heart of the campus is a green, inspiring area, with a former convent (1952) as a beautiful central heritage building. **On Breda's (NL) new campus it is NOT about mobility, NOR parking.... it's about a green, sustainable, attractive and 'car-less' campus. That's our vision**
- Besides we as University of Applied Sciences could not neglect the expression: 'Practice What You Preach': as the best national educational institute for Mobility, we had to showcase the best we could think of and organize. Which we did in this so-called **ViPP-Plan: Very Innovative, Individual Parking and Mobility Plan**. In BUAs's vision our new campus offers a green area with a pleasant environment. To ensure this attractive environment in 2014 we started preparations for a Mobility and Parking Plan as part of a general Master Plan. Fitting within the goals of this Campus Master Plan, this ViPP was formulated in 2015 (available in Dutch).
- Pillars for the ViPP -Plan, matching with the goals from the Campus Master Plan are:
 - Green and liveable campus, not an asphalt-paved car park

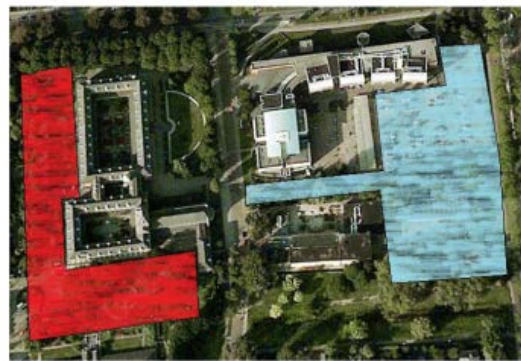
- Sustainable campus, from solar panels and climate control till offering more sustainable mobility options in a broad perspective (walk, cycle, shared cars, PT)
- Learning Communities and Living Labs: using the 'brainzzz' we have 'in the house'
- Offering the city and surrounding residential areas extra urban quality by adding this green and sustainable campus: no fencing, a park, renovation of national heritage (convent) and facilities like restaurants, meeting rooms and electric shared car schedule also for residents

Monitoring is base of the ViPP-Plan: these 4 goals above form the indicators for monitoring and checking the effort and results of our package of measures: how sustainable? Which modal shift? Happy or complaining neighbours? Park place occupancy?

- The ViPP-Plan contains a package of mobility management measures:
 - In 'Hardware': infrastructure and physical measures.
 - In 'Orgware': by involving stakeholders like staff, students, visitors, but also our neighbours (surrounding residential areas) and City Hall.
 - In 'Software': by informing all stakeholders and by raising awareness, from the very beginning (2014)

Goal was to plan and implement these measures even before the campus was ready: alternative modes should be integrated in daily life choices before.

- The biggest challenge in this package of measures to create a sustainable, green and pleasant campus for students, staff and 'the neighbours' was regulating parking because of doubling the amount of staff and students on the new campus, because of the centralisation: from approximately 3.500 to 8.800. The potential danger was that car parking was going to take place in the surrounding neighbourhoods, more than on the University campus. Therefore, possible solutions needed to be discussed with the neighbouring residential areas. BUAs worked and works together with neighbouring organizations on accessibility and liveability. An example of this is collaboration is the organization of electric car sharing for the surrounding organizations, the neighbourhood and the Municipality.
- Parking Norms were a real challenge: if we were obliged to follow the existing parking norms of the City, the whole campus would be paved with asphalt (s. picture: in blue: former 330 pp and in red: new to be added parking places without any mobility management) to facilitate car parking: 740 parking places, where in 2014 some 330 places were offered. In consultation with the municipality of Breda there has been determined that there may be waived from the parking ratio, allowing BUAs to implement measures instead of enlarging the amount of parking places from 330 to 740. Still, it is expected that this will not lead to a worse accessibility, it will rather improve the quality of life. This was possible by a new and unique type of cooperation between the municipality of Breda, residents living in the campus area, surrounding organizations and BUAs.
- For more measures see attachment 1.

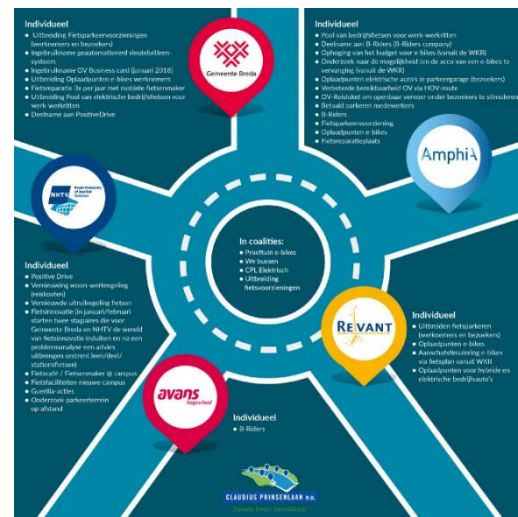
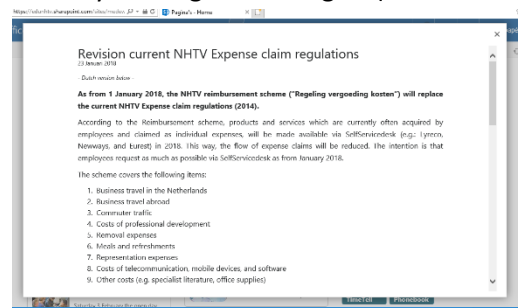


Figuur 2.1 (Huidige parkeernormen. Extra parkeernormen indien norm aanhoudert)

Active involvement and stakeholder engagement

- In the planning phase (2014-2015), the project team – together with BUAs's Executive Board, academy directors, heads of services and Participation Council – developed and adopted a vision of the new campus.

- In the Design Phase (2015-2016) not only employees of BUAs, but particularly students were actively involved in the development of the new campus. A design competition generated a range of creative ideas from Leisure and Urban Design students. Their ideas were adopted in a bid book and finally in the ultimate design. This happened, among other things, in the form of student projects, internships, 4th years minors, guest lectures and research placements.
- Local residents and other external stakeholders were and still are also actively involved. Debates were organized to inform these ‘neighbors’.
- To raise internal awareness on especially mobility demands and modality shifts, internal and external information, workshops and discussions were executed through:
 - Presentations of student’s products and results (regularly study days with the name: ‘Meaningful Meetings’)(2015, 2017)
 - Presentation of the ViPP-plan at special occasions like Education-Day (2018)
 - Internal workshops for staff about mobility management and the ViPP-plan
 - As professors in Mobility management and Mobility Planning we thought BUAs should show best practice on our own site: **practice what you preach**
 - Using BUAs’s internal social media: short mobility messages on ‘Insight’ (internal information portal)
 - Lecturing our own mobility and urban planning students about the theme Mobility Management, SUMP and active modes
 - Informing staff about new regulations for travel expenses (s. print screen)
 - External emphasis is organized by giving guest lectures abroad (Berlin) and workshops in Maastricht and Upsala (ECOMM-conferences 2017 and 2018), by a professorship workshop with internal stakeholder engagement and by asking the top 5 of Dutch Mobility Management experts in the ‘Big Five-workshop’ (2015) to react on the ViPP-Plan.
 - **Co-operation** with other large neighboring institutes with shared electric vehicle (Brabant Mobility Network, of the Province of Brabant: s. picture).
 - **Yearly monitoring** of modal splits and modal shift (s. picture target groups) (see attachment 1)

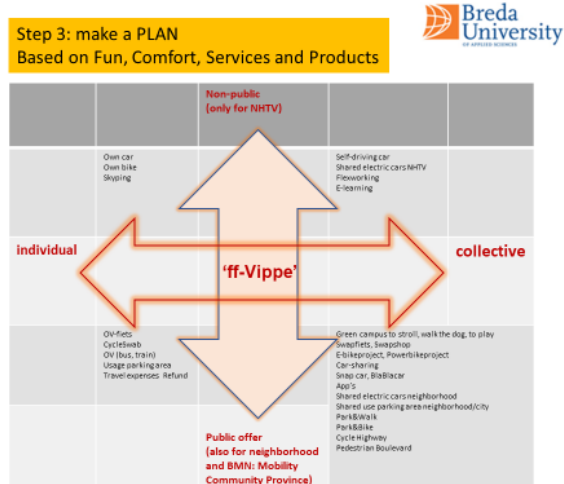


Date of implementation of the package of ViPP-measures

- Planning this campus area and renovation of old and newer buildings (like the convent) started in 2014. In that same year the preparations for mobility management started. A smart mobility plan for the new BUAs campus, that was the idea, could offer several opportunities and address different types of chances (under 'vision').
- With the ViPP Plan a whole package of measures was planned and executed since 2014.
- Planned measures were based on the ViPP concept:

Happy mobility management:
how can WE as NHTV work on that?

→ Campus Mobility Plan: 'ff Vippe' → (new) mobility services and products



- We used SEGMENT to monitor target groups and to define travel style groups for tailor-made measures and we concentrated on rewarding instead of punishing:

3 main travel style groups (NHTV campus research):
check: www.reisstijltest.nl or www.segmentproject.eu/segmentationquiz

- 1 De Praktische Reiziger**
M: 33%, S: 33%
Scharste parkeerplaatsen, conflictieve looproutes, OV spaarsysteem, belonen lopen + fietsen, beperken verplaatsen, lastdalen aanpassen, campus fiets, betaald parkeren, P+R, belonen OV gebruik.
- 2 De Gemotiveerde Reiziger**
M: 29%, S: 14%
Scharste parkeerplaatsen, conflictieve looproutes, belonen lopen + fietsen, beperken verplaatsen, lastdalen aanpassen, campus fiets, betaald parkeren, P+R
- 3 De OV-gebruiker**
M: 2%, S: 1%
Conflictieve looproutes, OV spaarsysteem, belonen lopen + fietsen, beperken verplaatsen, lastdalen aanpassen, campus fiets, belonen OV gebruik.

Research: what to offer with ViPP?

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Reward or punish?

Concept 'reward': 5

- Belonen lopen
- Belonen fietsen
- Belonen OV-gebruik
- Getting up hot OV
- Conflictieve looproutes

Concepten 'less friction': 2

- Verrijken OV
- Verrijken OV

Concept 'punish': 3

- Beperken verplaatsen
- Beperken verplaatsen
- Beperken verplaatsen

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- Phasing measures (2017-September 2019): see attachment 1 (and below):

'ff ViPP-en' possible measures

- Short term: 2017-2018:**
 - NHTV: cycle projects: a-bikes, bike guinea, speedshare. Research on more possibilities
 - NHTV/City hall/neighbors: parking regime discussion
 - NHTV: NHTV-app, and with Breda: Positive Drive App
 - NHTV: Business Plan Park&Bike
 - NHTV: in campuplan: cycle parking facilities
- Before start campus phase 1: Summer 2018:**
 - NHTV: research: lines, lessons, facilities employees and classes (S 45/9 15)
 - NHTV: marketingplan #100%
 - NHTV: organizing P&W (with bikes)
 - NHTV: introducing rewarding behavior in personal travel
 - NHTV: pilots met e-learningcolleges
 - NHTV: promoting working at home
 - Start campus: Summer 2018:
 - City: cycle highway spulakstraat
 - City: better pedestrian connections
 - NHTV: restoration campus
 - NHTV/City Hall: introducing paid parking NHTV?

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Executed campus measures: ViPP Plan

- BUas's Checklist on ' (Best) practices implemented in the last five years (2014-2018)': ViPP Plan, please see attachment 1







The ViPP Plan: conclusions and lessons learned so far







- That's hard, since our new campus is 'under construction' and only will be ready by September 2019. But a glance can be gotten at this video:
<https://campus.buas.nl/en/2018/new-campus-video-release-2/> (please take note of the amount of bikes and the prominent place these bikes have: closer to the entrance than cars!)
- Conclusions and lessons learned:
 - a. Expense and Financing: not spending money on realizing parking places saves a lot of money for mobility management!
 - b. Promoting a better quality of the new campus is better than telling people that they are not longer allowed to come by car (it's NOT about mobility...)
 - c. Involve neighboring areas and offer them something valuable
 - d. Mix of Hardware-Organware and Software is an effective approach
 - e. Parking regulation is key for a liveable, sustainable and green campus!

Practicalities/contacts

- Contact university:
 - Name/surname: Ineke Spapé
 - Job position: professor mobility management
 - Email address: spape.c@buas.nl
 - Phone number: +31 6 2611 0860 (cell phone nr.)
- Letter of Endorsement: please see attachment 2

Attachment 1. BUAs's Checklist on '(Best) Practices implemented in the last five years (2014-2018)'

Criteria UMOB	Done/ implemented by BUAs?	Explanation, examples from BUAs's ViPP-plan	Result, product, measures BUAs's ViPP Plan (achieved 2014-January 2019)
I: Collaboration between University and local stakeholders		Yes, internal (within university) and external contacts: working group of neighborhood committee, with (still) regular meetings about informing residents and signalize upcoming problems.	<ol style="list-style-type: none"> 1. Appointments with neighborhood about parking problems. 2. Monitoring program (yearly)
II: University mobility management and Governance		Yes, lots of discussion with mobility officers and eldermen (policy) of the City of Breda about accessibility, entrances, parking norms and cycle and pedestrian networks to link BUAs to the city. Unique process, discussion on several levels (also elderman level) and unique outcome (Omgevingsvergunning, Building permits with limited amounts of parking places with fall-back option in case of troubles)	<ol style="list-style-type: none"> 1. Lost discussion about connecting BUAs directly to a local main street 2. Local legal Building approval (Omgevingsvergunning) with reduced car parking norms (max 330 places) and with buffer in case of parking nuisances for the neighbors. Unique in the Netherlands: one of the first!
III: Promotion of pedestrian mobility		To be improved, partly realized, mainly in plans (travel imbursement for pedestrians) and in a little campaign (2018): walk-to-work-day. Plan for 2019: Walk-to-Work-day, plan for 2020: improving the route between Breda Central Station and Buas with students and City of Breda	<ol style="list-style-type: none"> 1. Walk-to-Work-campaign 2018
IV: Promotion of cycling mobility		<ol style="list-style-type: none"> 1. already existing (long tradition in NL, for decades): cycle subsidy plans BUAs (through financial-tax legislation). 2. New travel imbursement regulation with rewarding cyclists and offering them subsidized bikes, e-bikes and speed bikes (again financial-tax legislation) 3. Cycle parking (3.300 places) at campus in several qualities: 	<ol style="list-style-type: none"> 1. 2. Realized: 2.500 stands close to entrances (for students) and (in September) opening of two covered, closed compartments (500 cycle parking places) 3.
V: Promotion of public transport		<ol style="list-style-type: none"> 1. Appointments (2016, 2017, 2018, 2019) with bus company (Arriva) to strengthen the link between Breda Central Station and BUAs: more busses in rush hours, more frequencies. 2. Unique Travel imbursements that make PT-trips easier (since September 2018): all trips made by public transport (even the private ones) can be done (and are registered) by a NS Business Card. Private trips are marked and re-calculated by the monthly loans administration 	<ol style="list-style-type: none"> 1. More busses, more frequently from September 2019 2. Travel imbursement
VI: Promotion of a more efficient car use		<ol style="list-style-type: none"> 1. individual advice-on-demand for staff 2. even rewarding car drives (if they park on our site or on P&R)(we 'punish' illegal parking staff and 	<ol style="list-style-type: none"> 1. Individual advices (since September 2018) 2. Leveled reward system for car parking (since September 2018)

		<p>students by NOT paying them rewards)</p> <p>3. Offering shared e-cars, together with City of Breda, other university and a local hospital (area mobility management project of Province of Brabant</p>	<p>3. 6 shared electric BMW's (since April 2018)</p>
VII: Intermodal mobility		<p>1. By offering intermodal travelers options and efficient travel imbursements</p>	<p>1. Travel imbursement supporting intermodality</p>
VIII: University educational and curricular system		<p>1. A new flexible working places system is researched and implemented in all 4 existing locations (2 years of experiencing) to get used to it before moving to the campus (2017, 2018)</p>	<p>1. Integrated and accepted flexible working places schedule with different working zones (quiet, busy and medium)</p>
IX: Management of working time		<p>1. Possibility to work at home</p>	<p>1. Possibility to work at home</p>
X: Collection of data on mobility patterns		<p>1. Since 2015: yearly monitoring of modal split on all locations</p> <p>2. Several research projects of interns on modal splits, behavioral changes, SEGMENT travel styles, flex working etc. BUAs developed CommuteScan to help other institutes to define mobilitychanges</p>	<p>1. Yearly reports on modal splits and modal shifts, since 2015</p> <p>2. Several research reports on modal splits, behavioral changes, SEGMENT travel styles, flex working</p> <p>3. CommuteScan</p>
XI: Awareness and participation of the university community		<p>1. Raising awareness and informing staff and students about upcoming measures since 2016 by internal posts (portal 'Insight') and HRM lunches</p>	<p>1. Daily or weekly announcements on BUAs portal 'Insight'</p>
XII: Networking among Universities		<p>1. BUAs visited and presented in Barcelona</p> <p>2. BUAs contacted Erasmus University (Giuliano Mingardo) to learn from their (successful) mobility management approach</p>	<p>1. Several contacts with European Universities</p>

Attachment 2: BUAs's Letter of Endorsement



LETTER OF ENDORSEMENT

U-MOB LIFE is a European project funded by the LIFE programme from the European Commission. It is aimed at the creation of a university network to facilitate the exchange and transfer of knowledge about sustainable mobility best practices among European universities. This network will serve as a tool towards the reduction of CO₂ emissions due to the university community mobility.

Breda University of Applied Sciences (BUas) agrees to join U-MOB LIFE | European Network for Sustainable Mobility at University, according to the following **participation level**:

Level 2. IMPLEMENTATION OF MOBILITY BEST PRACTICES IN THE LONG TERM

BUas agrees to work to reduce CO₂ emissions implementing mobility best practices aimed at fostering public transport, bicycle and walking and reducing the car use¹.

Thanks to this involvement, BUas will obtain the **benefits**:

- Access to private website where useful documents are uploaded, such as training materials addressed to university mobility managers, a tool for measuring CO₂ emissions due to university mobility, materials for raising awareness in campuses, etc.
- Participation in awards to the most noteworthy best practices given in European conferences organized by U-mob network.
- Participation in the definition of U-mob network statutes.
- Dissemination of best practices in U-mob public website
- Active participation in events organised by U-mob project such as European conferences, round tables/discussion forums with other universities/stakeholders, etc.²

Signed in Breda, on 23-11-2017

Ineke Spapé, professor Integrated Sustainable Urban Mobility Planning,
BUas (Breda University of Applied Sciences)

¹ The cost of the implementation of best practices at each university shall be covered by own funds

² Travel costs for the participation in the events will be covered by universities

U-MOB LIFE PROJECT n° LIFE15 GIC/ES/000056 European Network for Sustainable Mobility at University

