

Sustainable mobility on EPFL campus

Sustainable Campus Conference, Novatlantis,
ETHZ, April 25, 2007

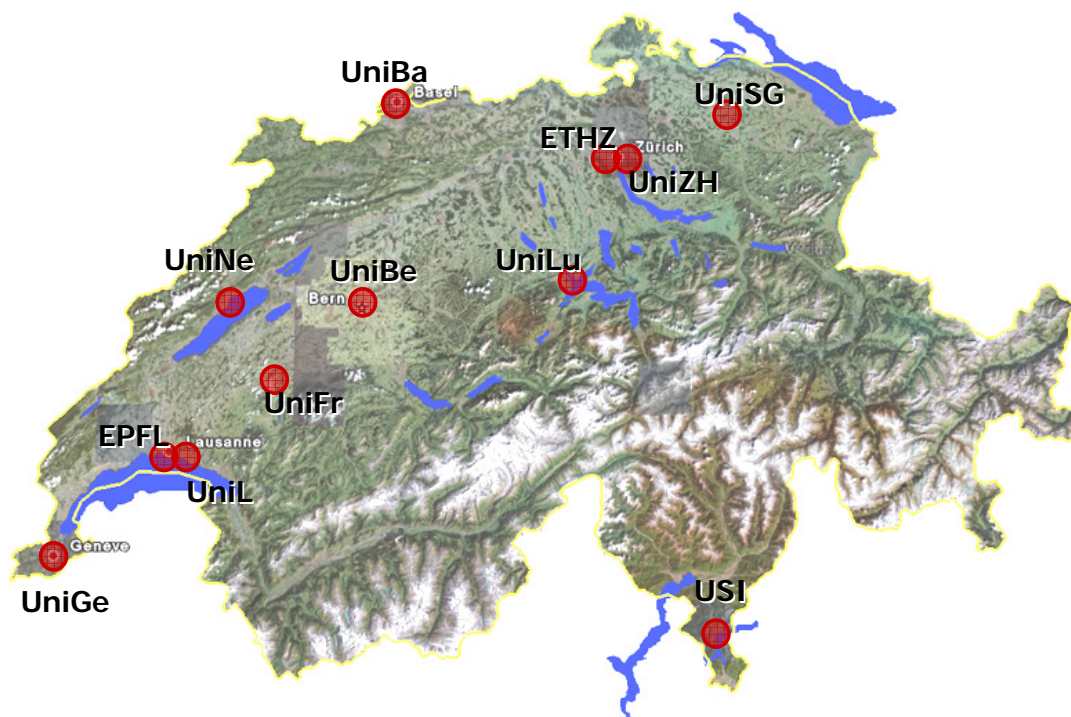
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Swiss academic landscape



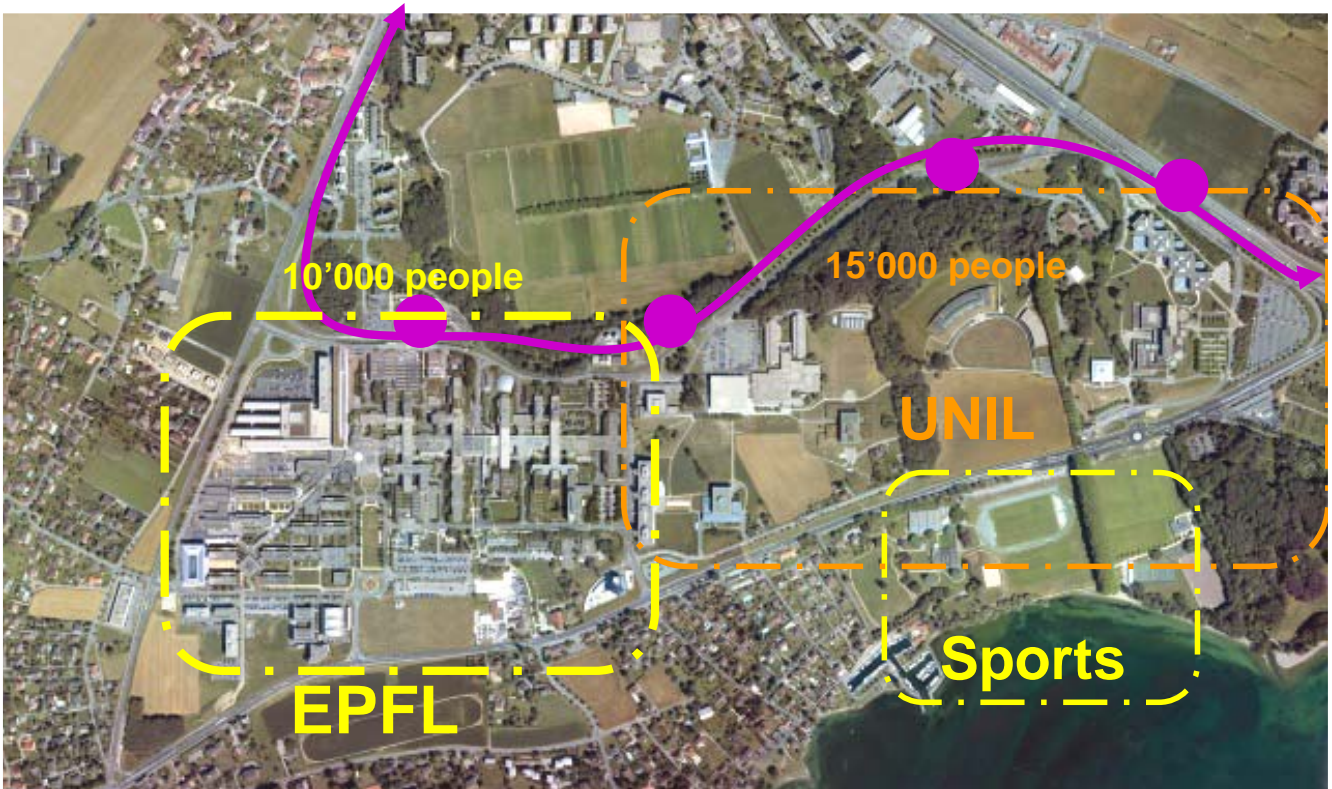
ETHZ and EPFL: Federal schools, akin to UC System

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EPFL Campus



Access to EPFL campus



Campus configuration



2005 Figures

1. Electricity: 44 GWh
2. Mobility: 40 GWh (2000)
3. Heating: 27 GWh

Road travel

EPFL vehicles & business trips: 796'000 km
of which EPFL fleet drove 450'000,
... burning 42'000 litres fuel

EPFL mobility actions

User behaviour

RUMBA mobility observatory

Access to campus

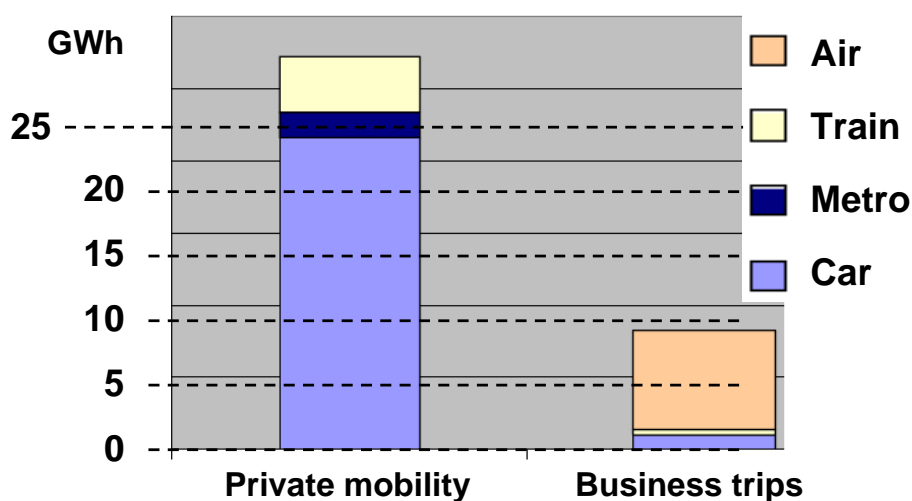
- Improved public transport timetable
- Free half-fare rail card
- More bicycle racks + “bike-to-work” action

Business mobility

- Car sharing system (implemented: 2004)
10 vehicles - 50% dedicated to EPFL.

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EPFL Mobility



40 GWh / year ... 8'500 tons CO₂
of which more than 5'500 tons from private motoring
(heating: 1'300 tons / year)

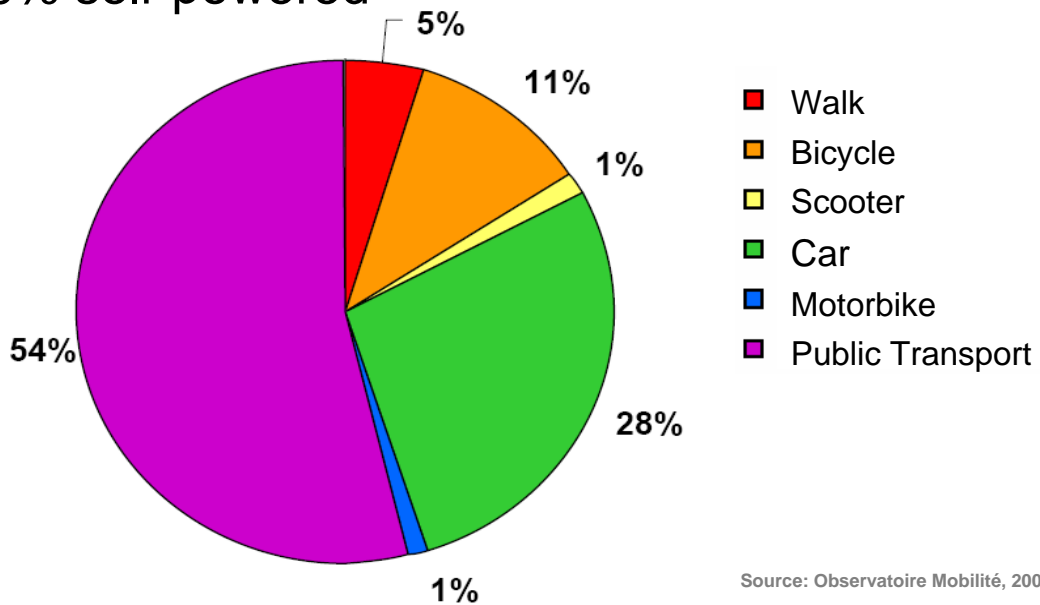
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1.1 EPFL Access modal split

30% private mobility -> oil-powered

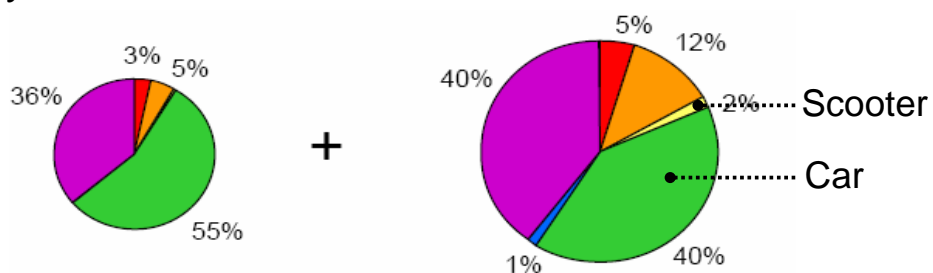
54% public transport -> electricity-powered

16% self-powered

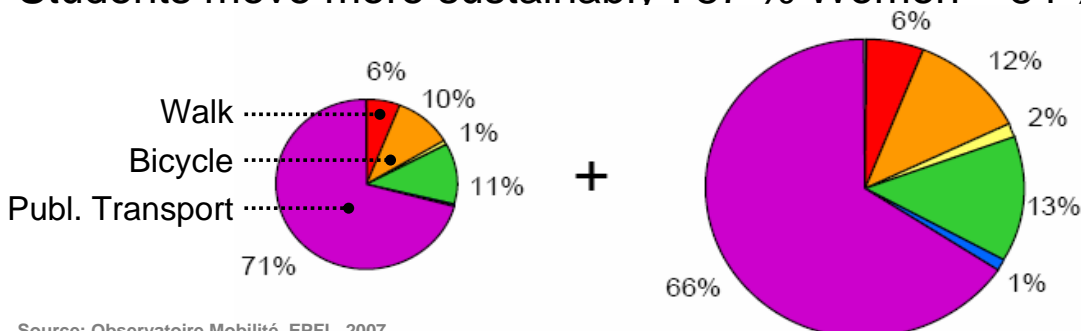


1.2 Staff vs. students

Staff mainly drive cars: 55% Women - 40% Men



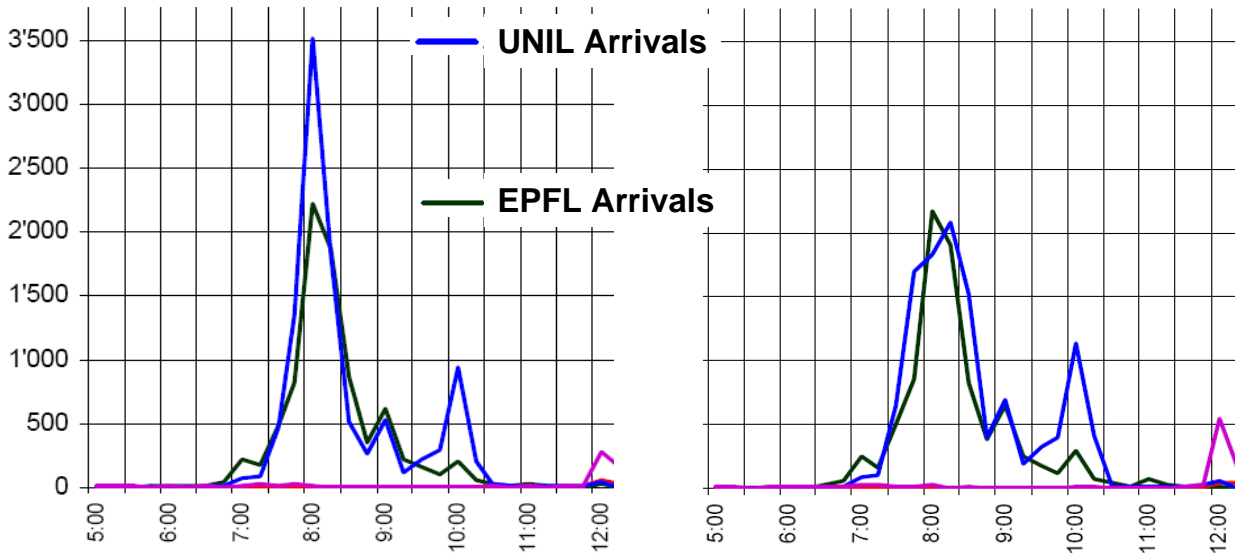
Students move more sustainably : 87 % Women – 84 % Men



Source: Observatoire Mobilité, EPFL, 2007

Coordination with Public Transport Operation

2006: new class schedule to decrease morning peak



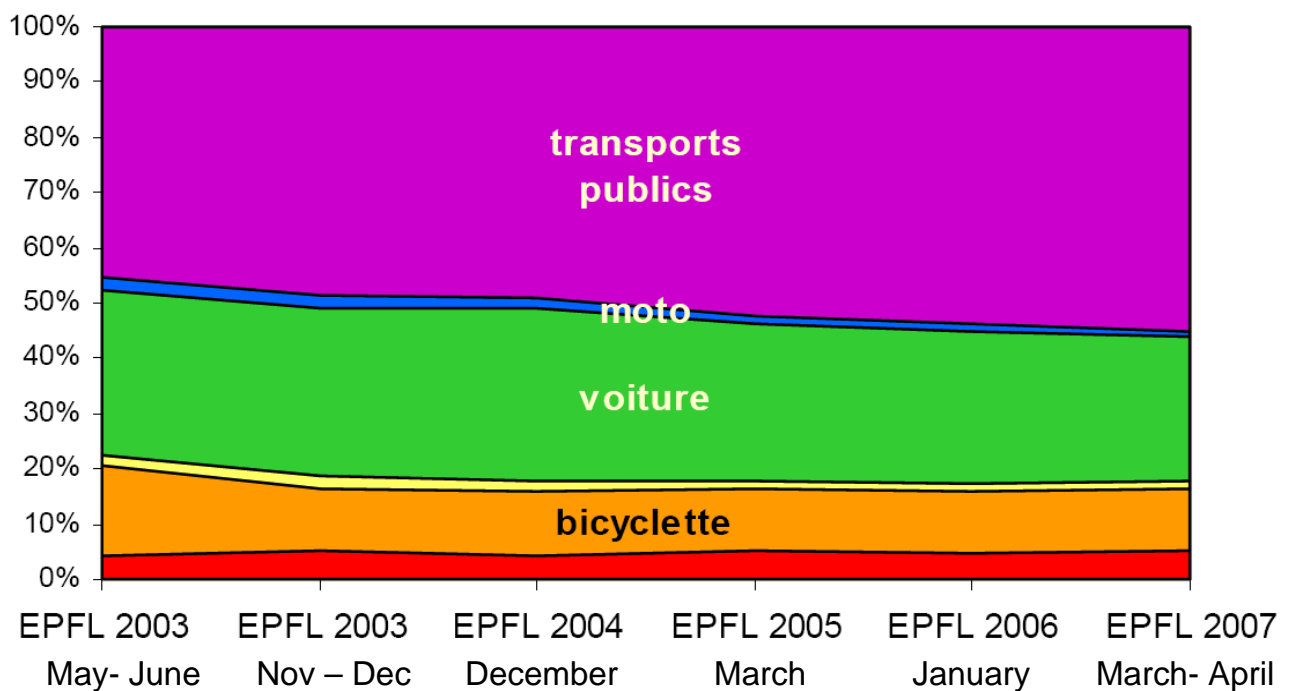
2005: EPFL and Unil start at 8:15 am

2006: EPFL at 8:15 am / Unil at **8:30** am

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Adapted from: Observatoire Mobilité, EPFL, 2007

EPFL modal split evolution



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Results of EPFL mobility actions

User behaviour

RUMBA mobility observatory: diagnosis tool

Access to campus

- New metro timetable: more convenient travel
- 160 new bicycle places => room for 600 bicycles
- “bike-to-work”: 450 participants at EPFL
- Half-fare rail card.. above 50% access by public transport

Business mobility

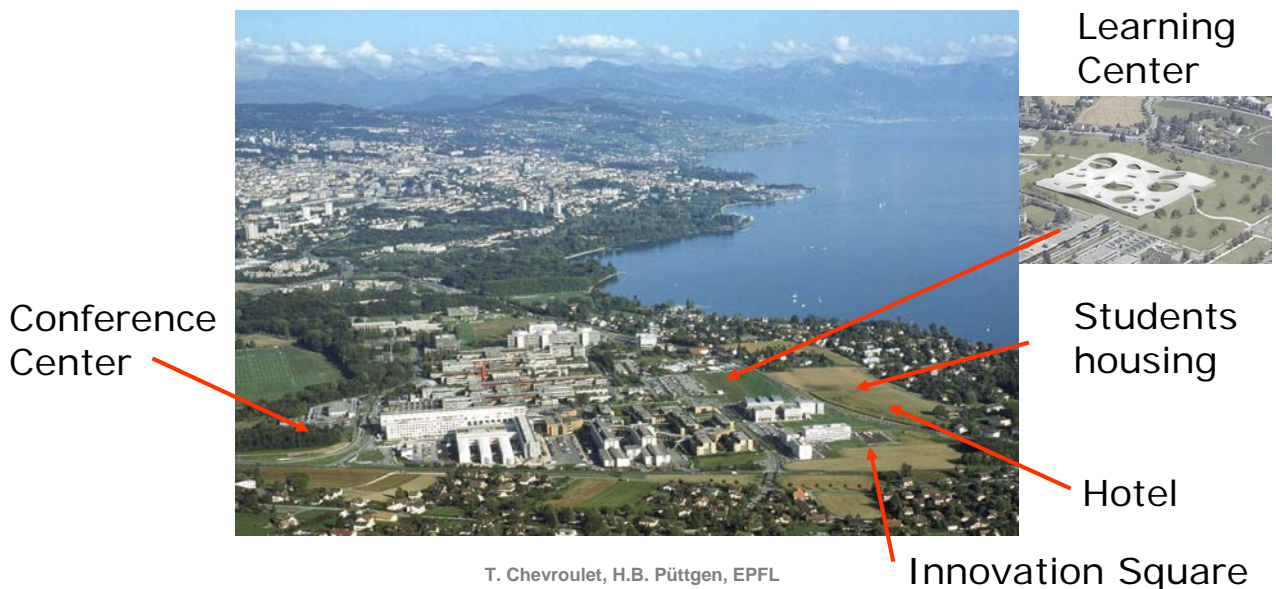
- Car sharing system used by all faculties
- EPFL fleet reduced by 66%
- Users are satisfied
- Maintenance and fuel costs (03-05) – 23% => CHF 300'000.- saved
- Fuel savings (03-05) -22% => 25'000 litres saved

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Next steps: campus densification

Mobility Plan - under construction

Further improve public transport, increase safety on site, negotiations about implicit subsidy to car parking (fee: 10 €/month)



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