

Long Term Expectations From the Surveys

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Overview of survey

➔ Demo cities

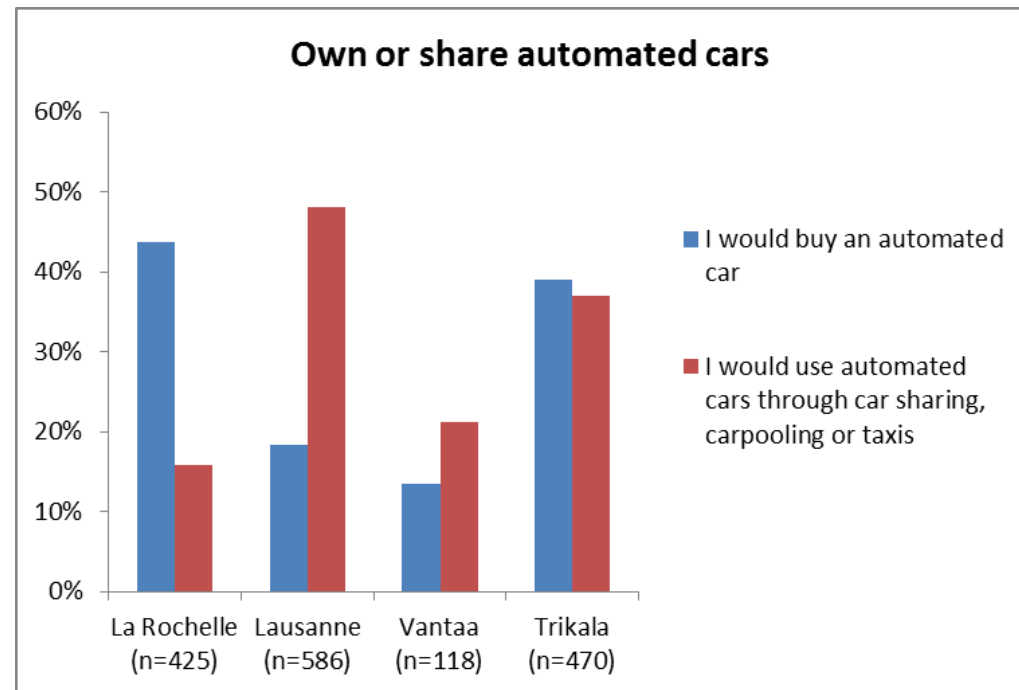
- ➔ La Rochelle
- ➔ Trikala
- ➔ Vantaa
- ➔ Lausanne
- ➔ San Sebastian

➔ Demo city surveys (Sample size)

- ➔ ARTS user experience surveys (1666)
- ➔ ARTS user stated preference surveys (636)
- ➔ Pedestrian and cyclist surveys
- ➔ Wider public surveys (1953)
- ➔ Stakeholder surveys (59)

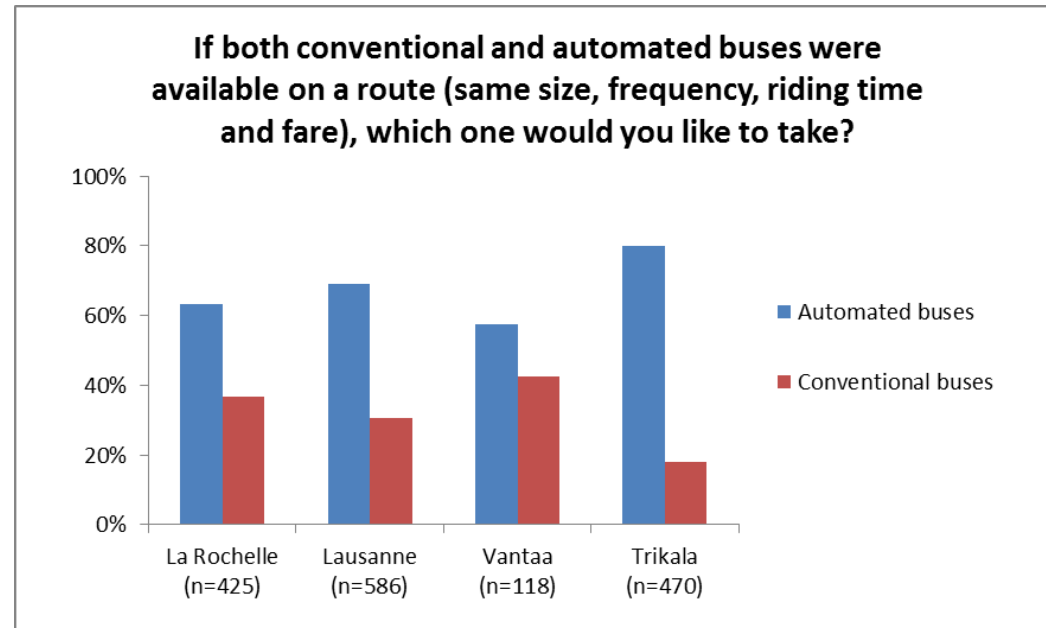
Public attitudes towards owning or sharing automated cars

- ➔ Gender effects: males are more likely to own an automated car
- ➔ Education: people with higher education are more likely to share automated cars
- ➔ ARTS experience: people with ARTS experiences are more likely to share automated cars



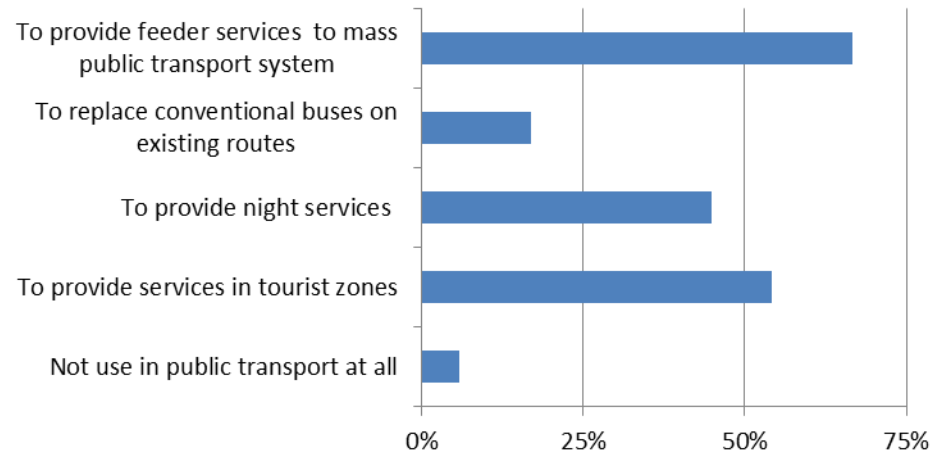
Choice between conventional and automated buses

- ➔ In general, automated buses were more attractive to the people surveyed than conventional buses
- ➔ ARTS experience: higher acceptance from the people with ARTS riding experiences (consistent across the three cities)
- ➔ Gender, age, and education effects: trends less clear and inconsistent across the three cities

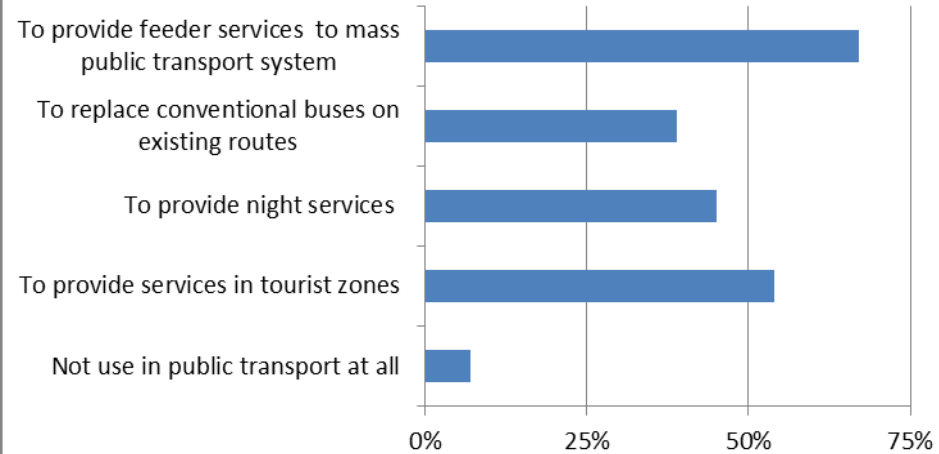


Public opinions on most supportive roles of automated mini buses

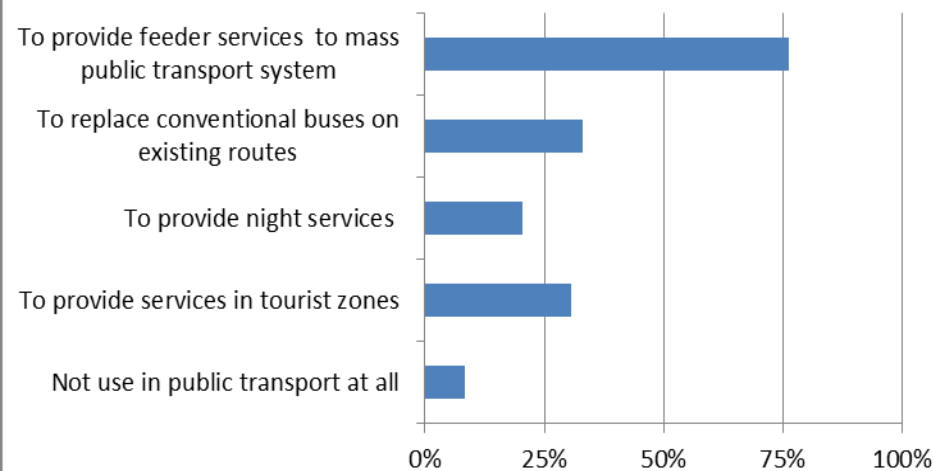
La Rochelle



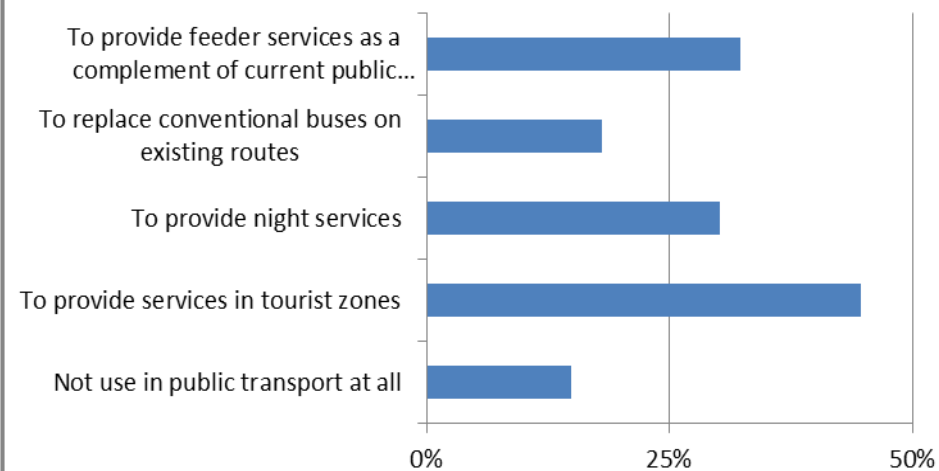
Lausanne



Vantaa



Trikala



A deployment scenario in La Rochelle

- ✓ Transport service for tourists
- ✓ 4.5 km route
- ✓ 9 stops
- ✓ A vehicle every ten minutes
- ✓ 10am-10pm (Apr – Oct)
10am-7pm (Nov – Mar)
- ✓ Free to users



Overview of what we have learned to take forward (1/2)

- ✓ In general, positive attitudes towards implementation of automated vehicles in urban areas are shown by all groups
- ✓ On the basis of the findings, new large scale field trials are supported and recommended. These should address the following:
 - i. ARTS vehicle operation in real traffic situations (Legal barriers must be overcome)
 - ii. Route selection should enable integration with other modes to provide realistic modal choice alternatives (Good level of service)
 - iii. A range of weather and context operations to confirm practical operations
 - iv. Higher average operation speeds
 - v. Complete operational/security/emergency management systems
 - vi. More comprehensive surveys to improve understandings of socio-economic impacts and behavioural interactions
 - vii. The development and applications of targeted awareness tools
 - viii. Financial and economic assessment including fare payment options

Overview of what we have learned to take forward (2/2)

- ✓ ARTS demos have shown the advantage of automated vehicle control: accurate and consistent
- ✓ Some human interventions were observed during the ARTS vehicle running with the on-board operator having to take emergency braking in order to ensure safety, which may have negatively impacted on the ARTS riders from safety and comfort perspectives
- ✓ Current ARTS vehicles need to be improved in order to run safely with full automation and at average speeds approaching those of conventional vehicles (e.g. hardware and software for object detection and vehicle control)