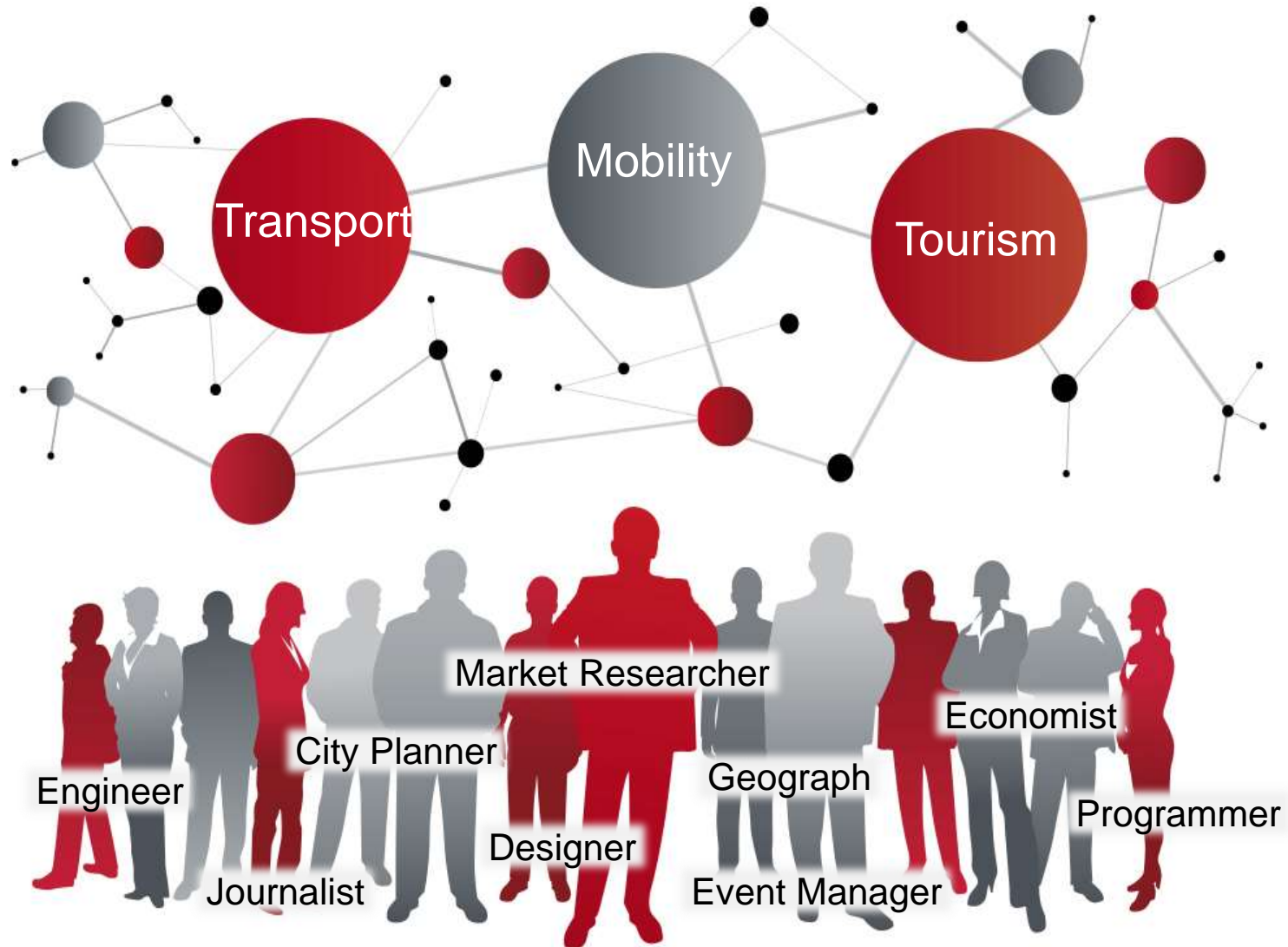


# Effects of second generation car sharing on Public Transport

Results of the car-sharing evaluation in the city of Munich, Germany -

Vancouver, 9/22/2015

Experience of 13 years, 50 experts, 300 projects und 10 innovation prices

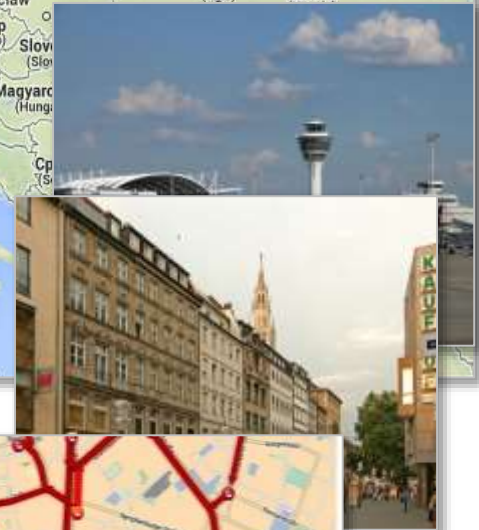


# Munich - Details

Size 311 sqkm

Inhabitants 1.39 Million

Density: 4468 Inhabitants/sqkm

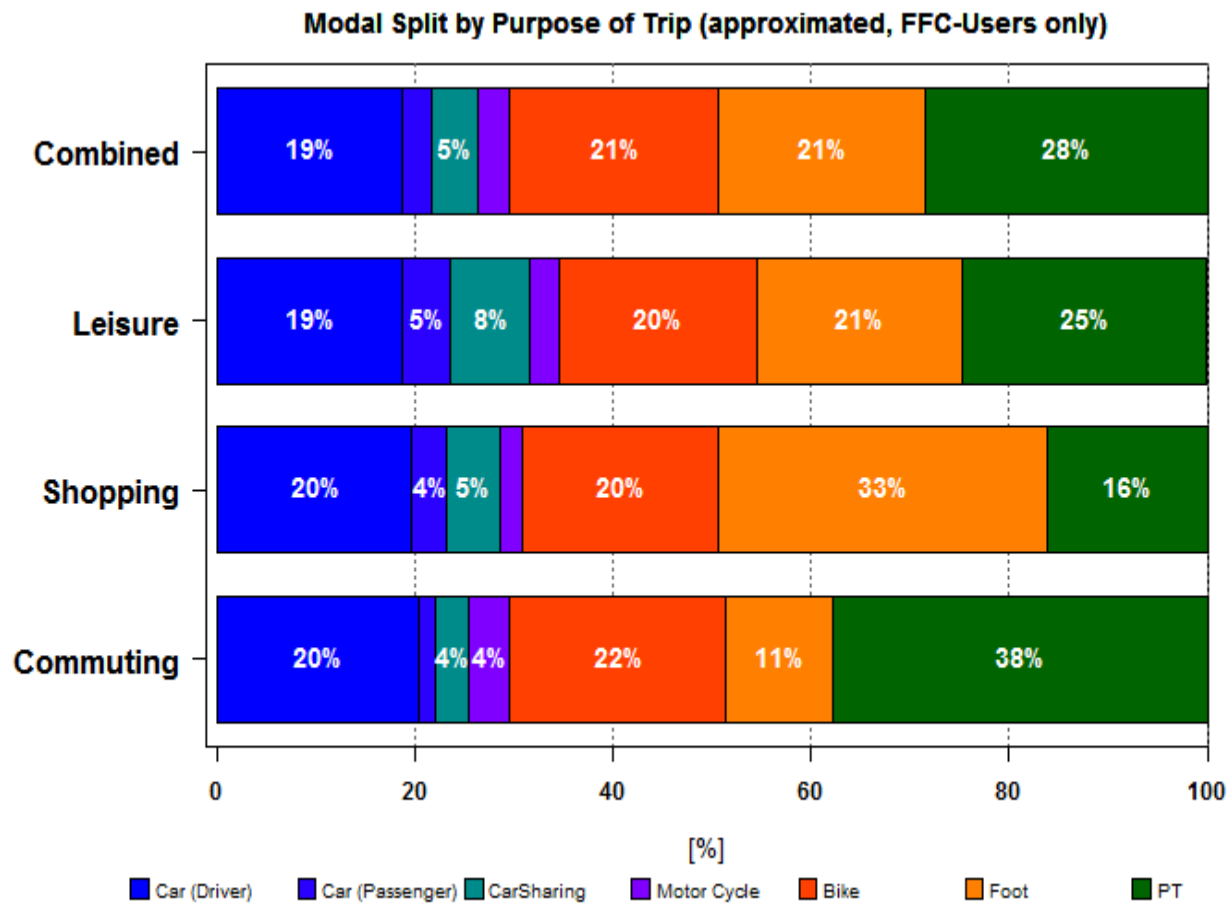


- Evaluation of CarSharing-Services on behalf of the City of Munich between 2013 and 2015
- Evaluated services:
  - FreeFloating: **DriveNow and car2go**
  - Parking-Area based services: **Flinkster and CiteeCar**
- Evaluation included:
  - Customer surveys: approx. **1.600 participants**
  - Survey on Munich citizens: approx. **1.000 participants**
  - Analysis on Back-End-Data: approx. **400.000 Trips**
  - Focus groups and expert interviews
- Project Partners
  - team red Deutschland GmbH
  - Dresden Institute of Technology
  - Omnitrend GmbH

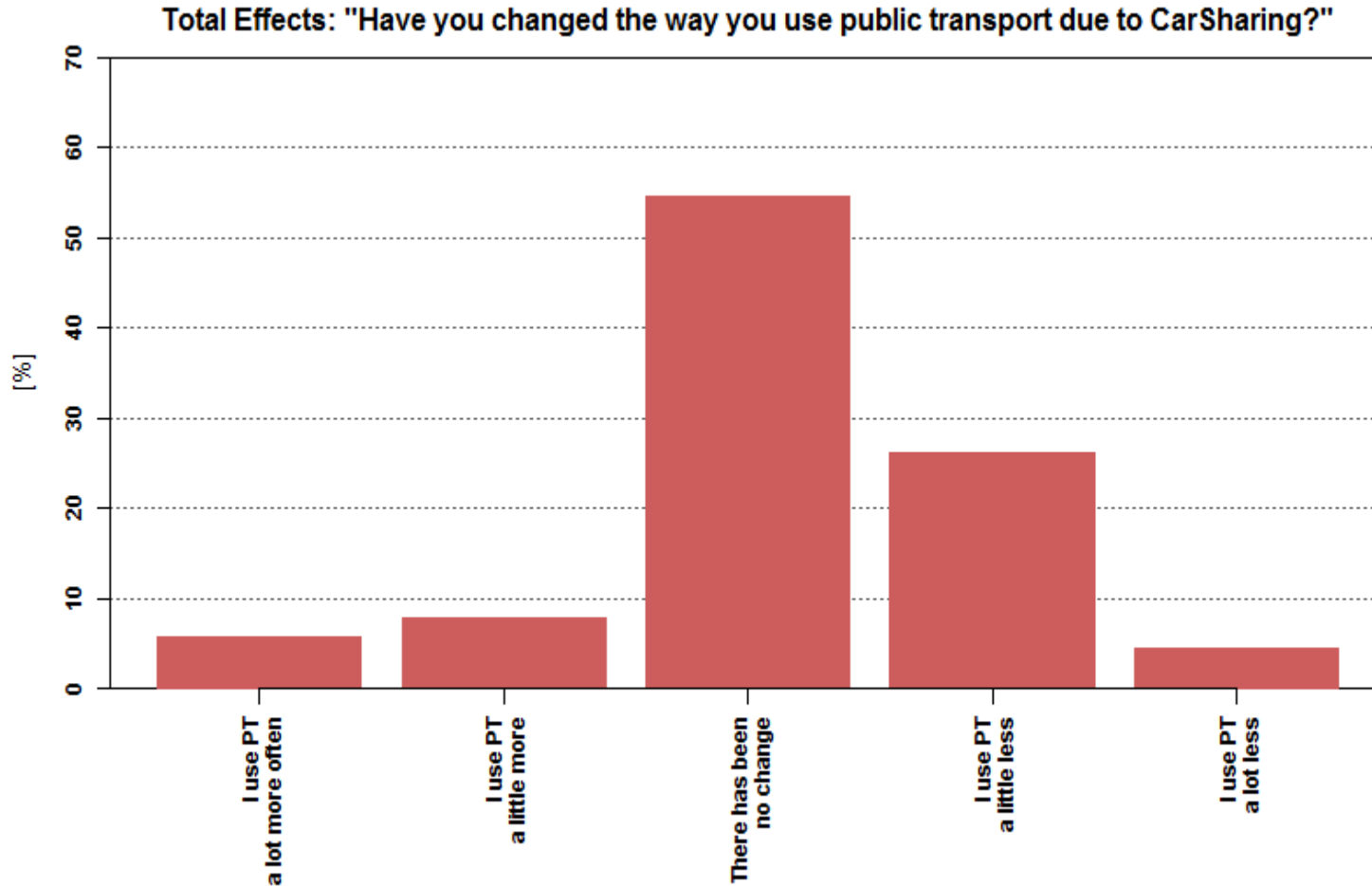


Landeshauptstadt  
München  
**Kreisverwaltungsreferat**

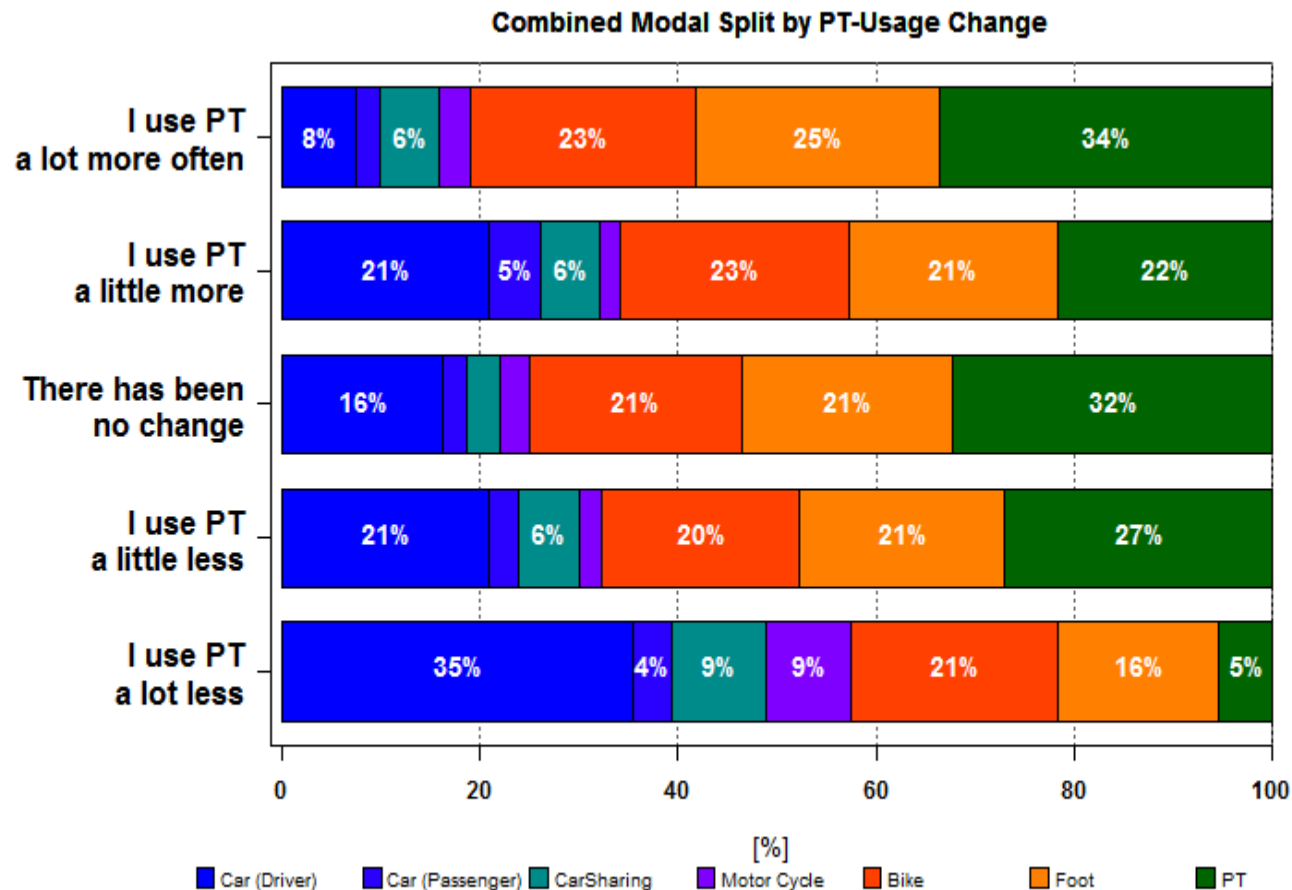




- No exact Modal Split Measurement
- Except Shopping, Public Transport is the mainly used mode by FFC-Users

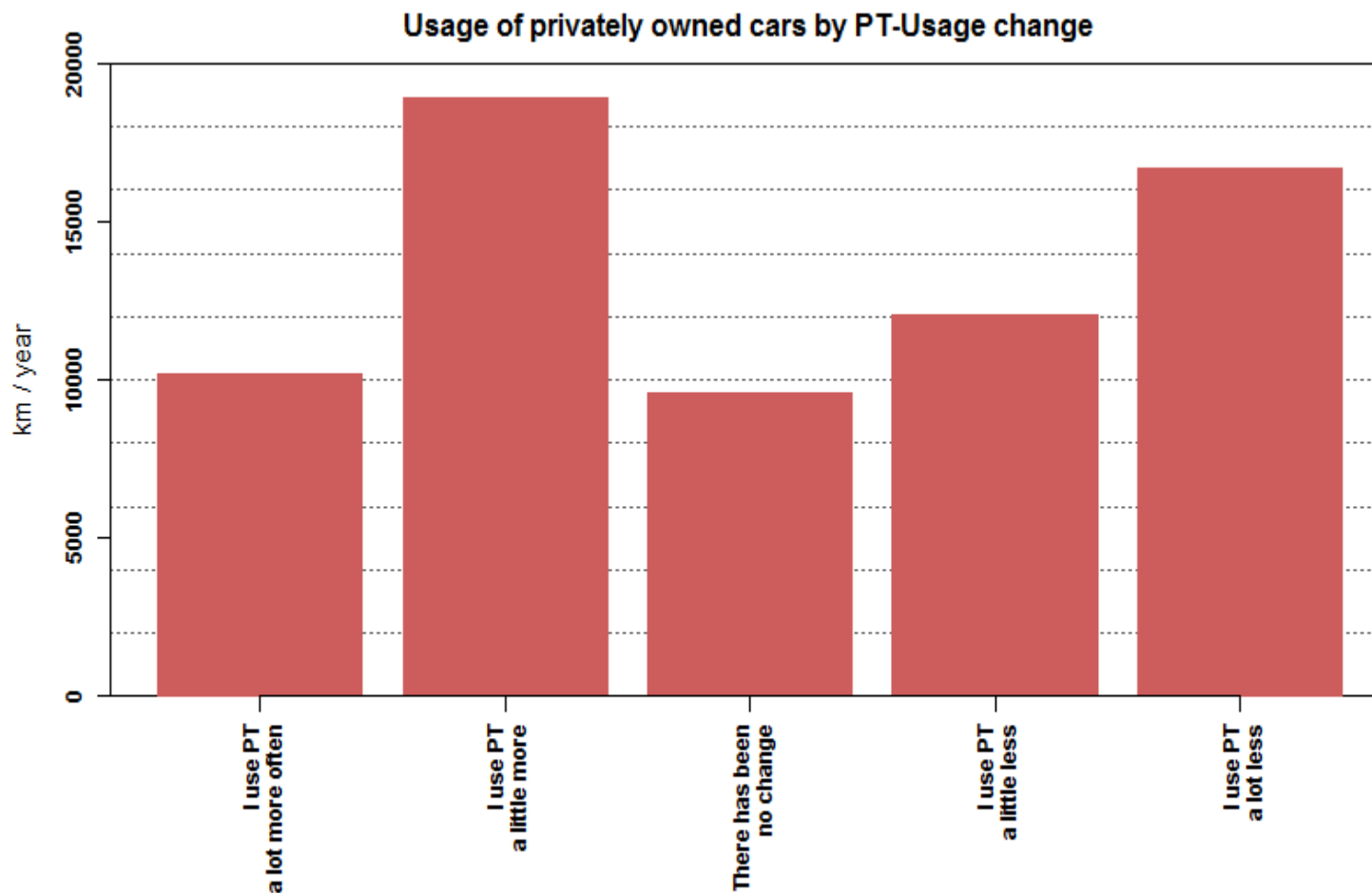


- Most FFC-Users report that there are no changes in PT-Usage due to FFC
- More FFC-Users report a slight decrease in PT-Usage than slightly increased usage

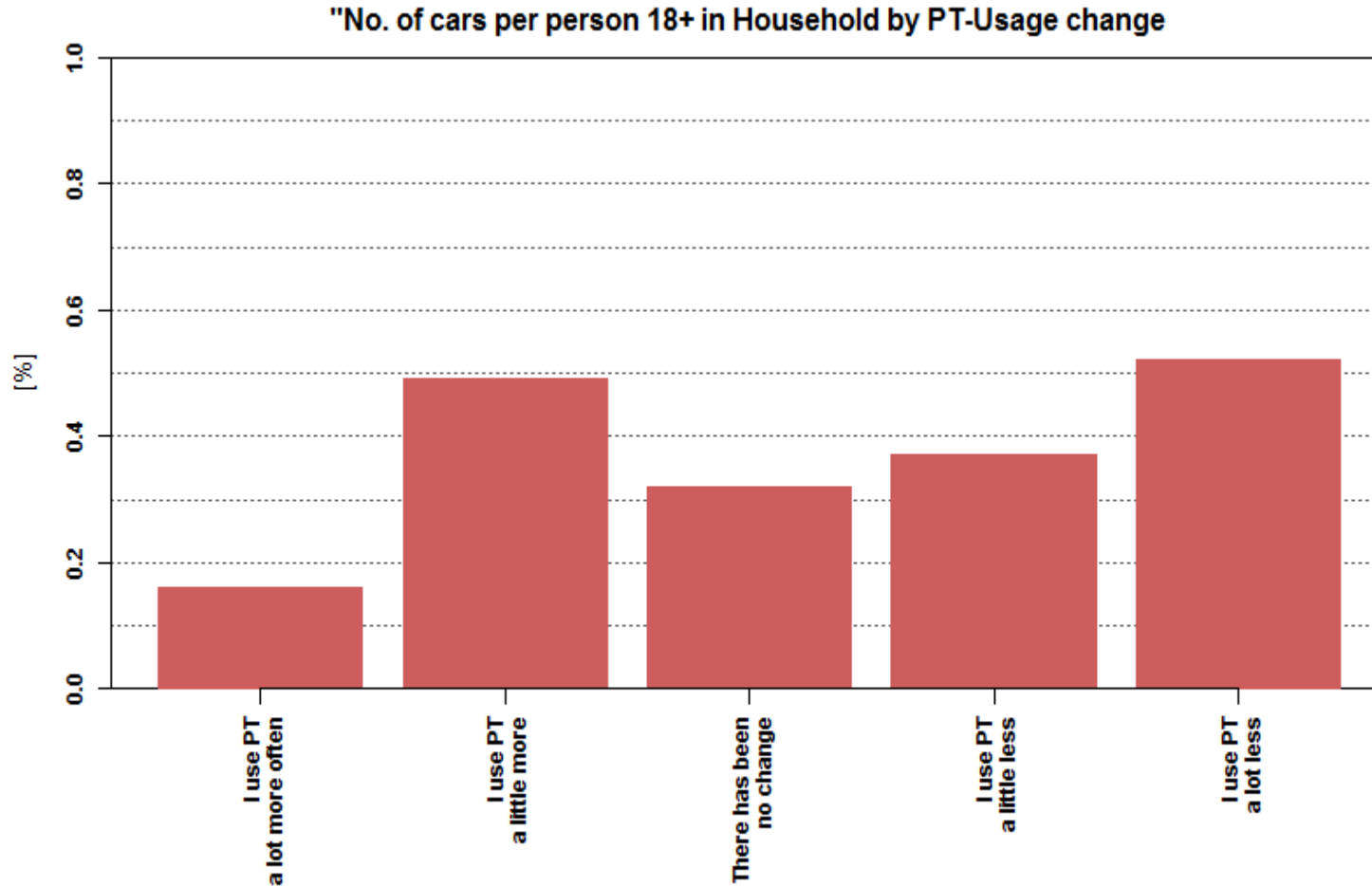


- Reported changes of PT-Usage correlate with the reported PT modals Split share
- Highest PT-Share by FFC-Users who report using PT a lot more often

PT Usage	N (Sample)	Household Type	Household Size (Total/Kids)	Ratio within "Mittlerer Ring"	Mean Age	Ratio <25	Ratio >45
<b>a lot more often</b>	56	With Kids (30%) Working Single (32%) Downtown people, <b>FF is a perfect add-on to existing PT-use</b>	2,1/0,3	<b>57%</b>	<b>43</b>	2%	48%
<b>a little more</b>	67	With Kids (38%) Working Single (23%)	2,3/0,4	48%	45	6%	51%
<b>no change</b>	<b>525</b>	With Kids (33%) Working Single (26%) Couples without Kids (25%)	2,2/0,4	<b>60%</b>	38	6%	19%
<b>a little less</b>	250	Couples without Kids (32%) Working Single (28%) With Kids (27%)	2,2/0,4	57%	35	15%	14%
<b>a lot less</b>	43	Couples without Kids (32%) Working Single (32%) Young singles / young couples, downtown / suburban, <b>FF is a perfect add-on to existing car-use</b>	1,9/0,1	50%	<b>34</b>	<b>21%</b>	9%

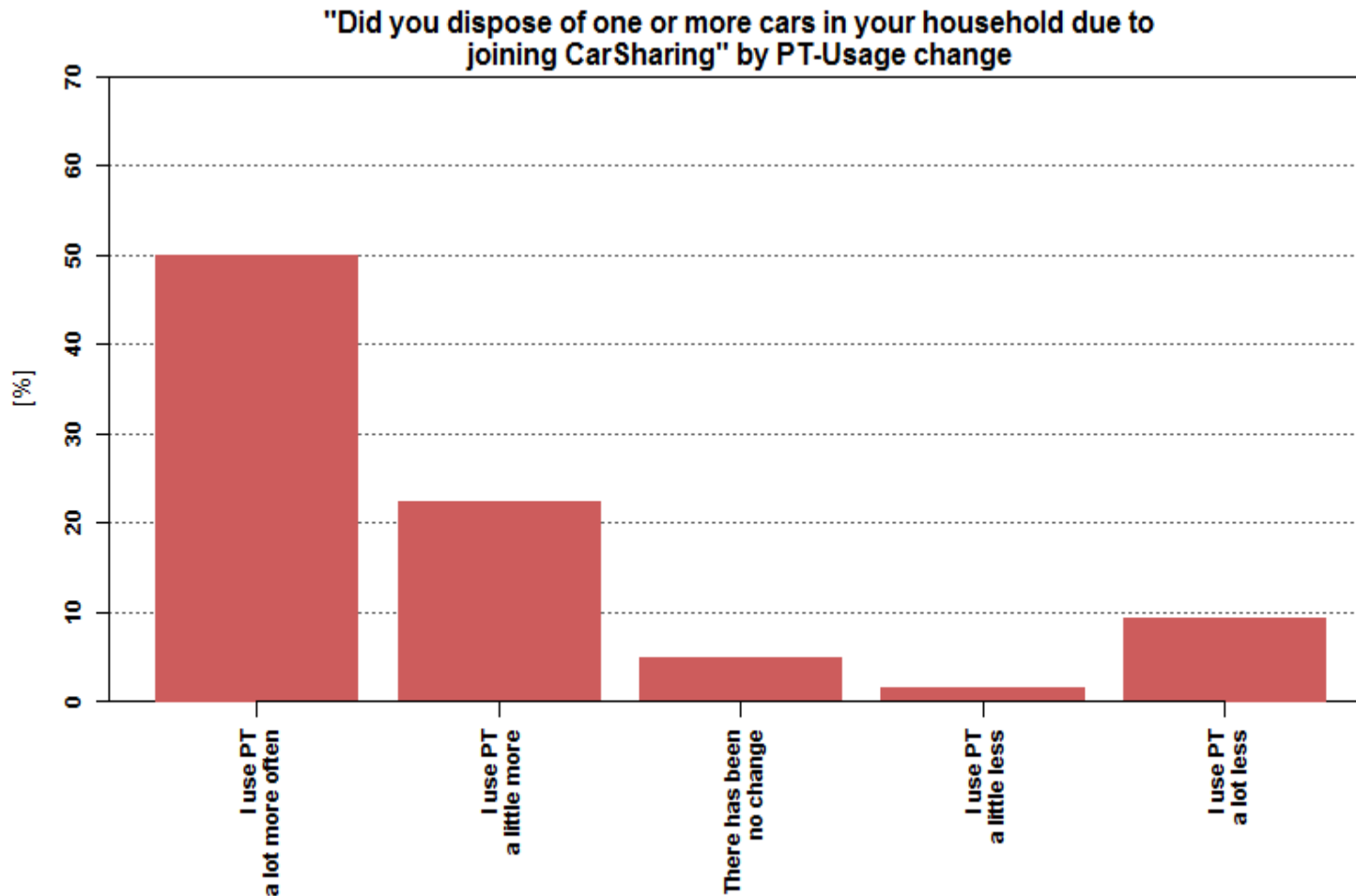


- Lowest own-car milage by users with no change in PT-Usage
- Highest own-car milage by users with little more PT-Usage

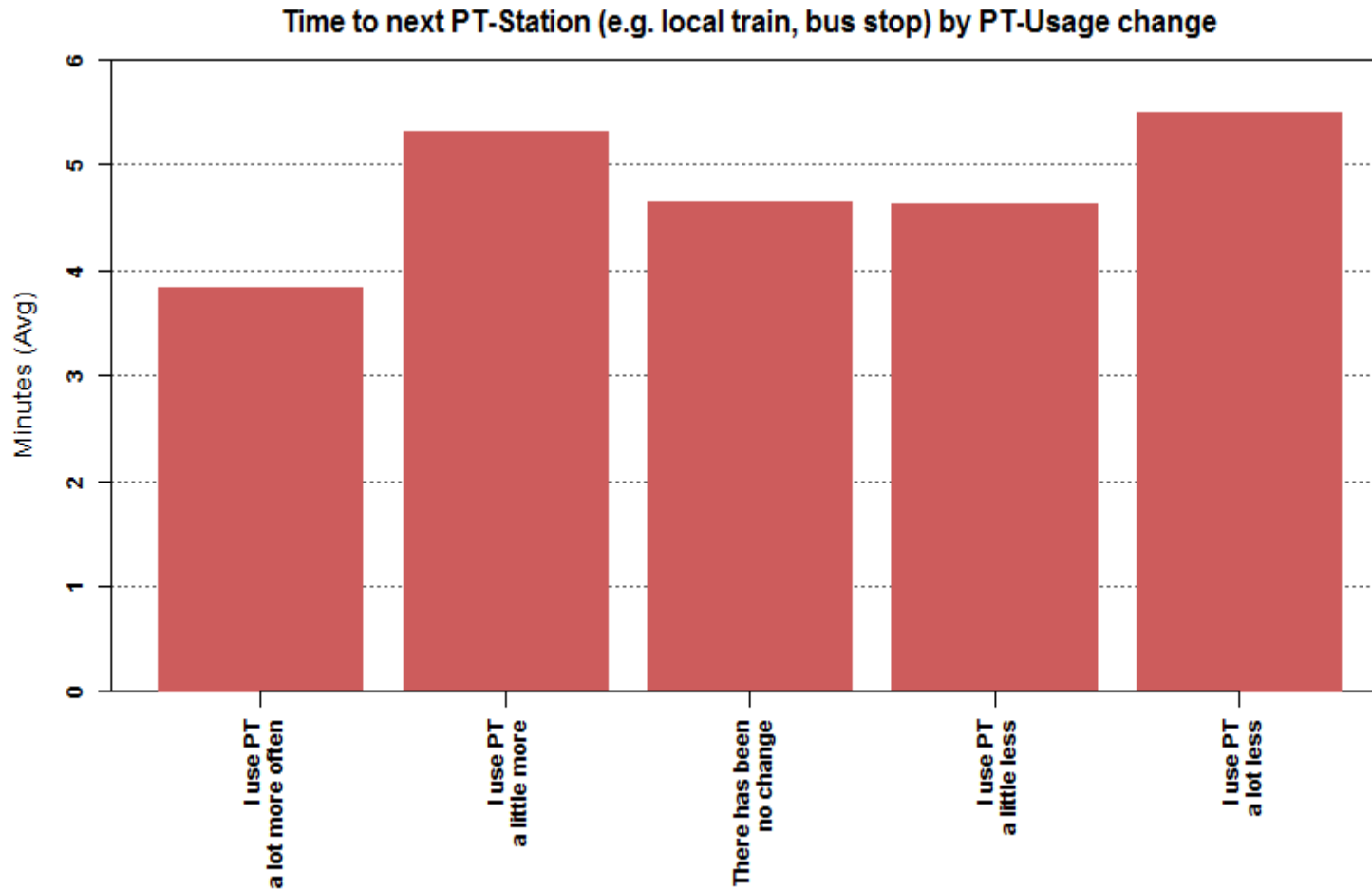


- Accordingly, the number of cars per person 18+ in the household is the lowest, when users report to use PT a lot more often

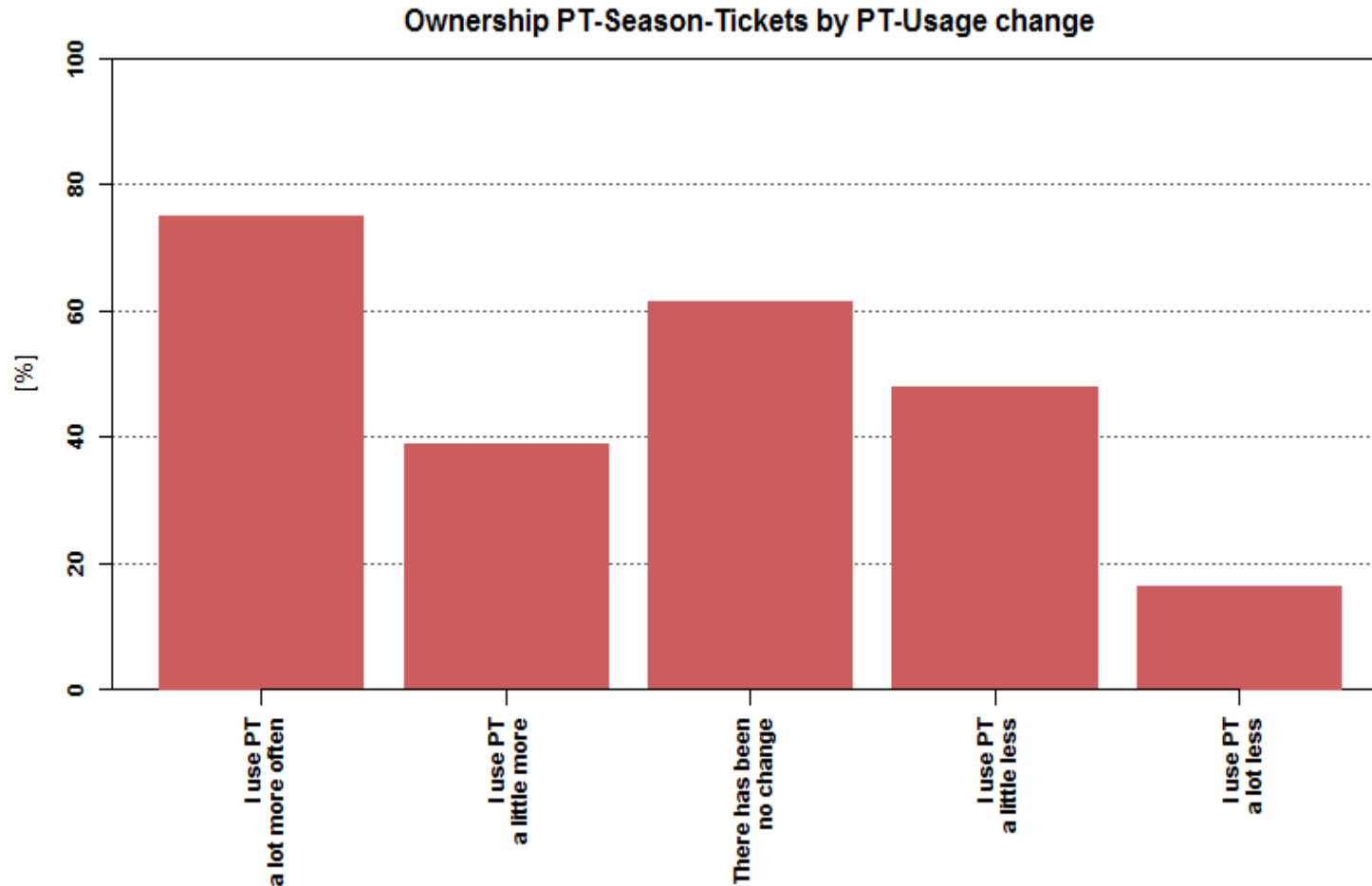
# FreeFloating CarSharing : Car Reduction by PT-Usage-Change



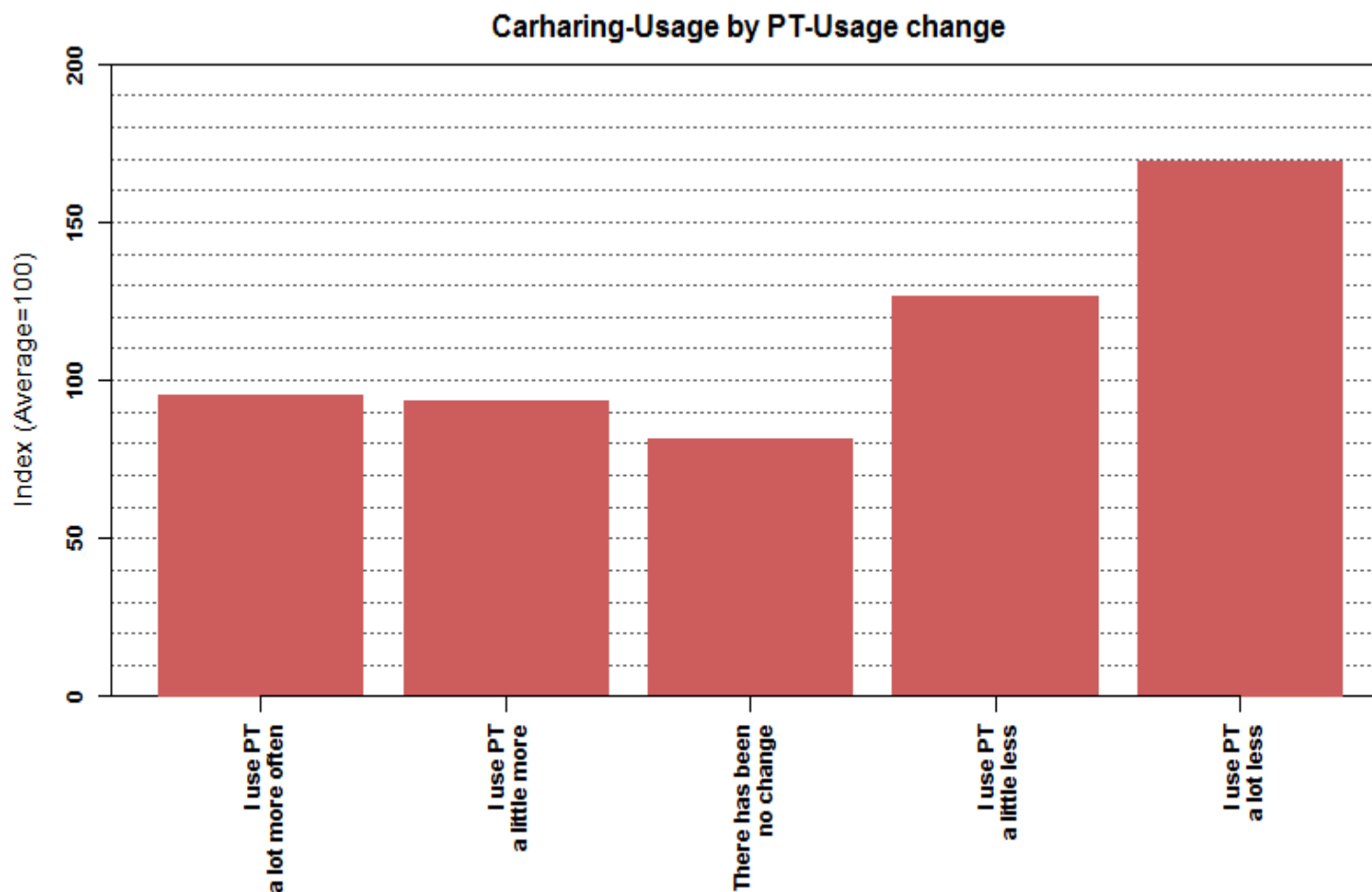
- Reported changes of PT-Usage also correlates with car disposal
- Highest no. of cars reduced by FFC-Users who report using PT a lot more often



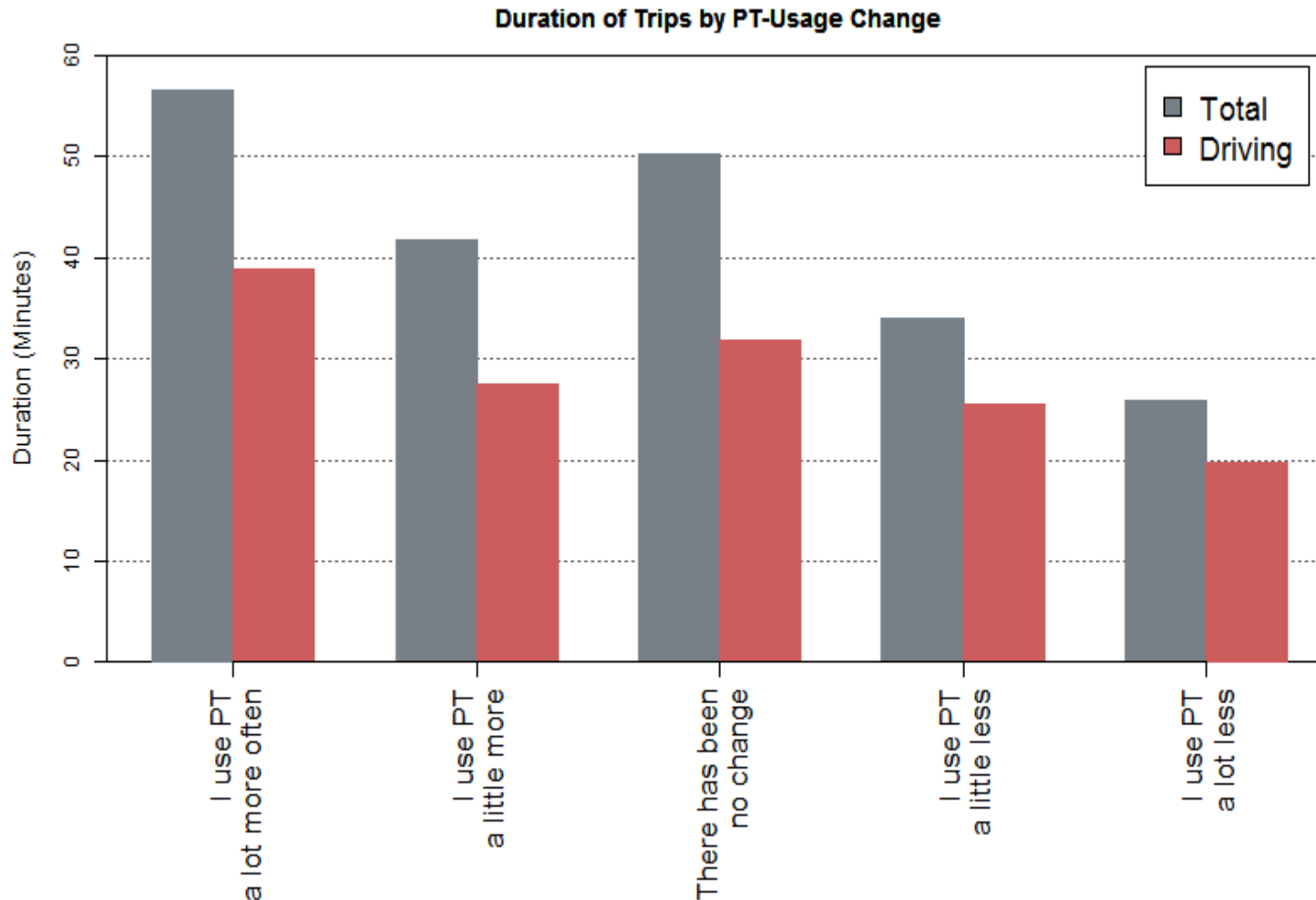
- FFC-Users who use PT a lot more report the shortest distances to the next PT-Station, all other groups are nearly at the same level



- FFC-Users who use PT a lot more have the highest share of PT-Season-Ticket holders



- FFC-Users with increasing or unchanged PT-Usage use CS slightly below average
- A decreasing PT-Usage correlates with an above average CarSharing-Usage



- FFC-Users with increasing or unchanged PT-Usage use have longer rentals
- A decreasing PT-Usage correlates with shorter rentals

- The evaluation confirms earlier findings about positive as well as negative effects of CarSharing-services on public transit and vice versa.
- Certain user groups increase PT usage:
  - Effect shows up especially, when CarSharing-Users get rid of their privately owned car and use public transit a lot more often
  - Having a public transit station nearby the housing is a key factor for starting off this process
- Certain user groups decrease PT usage:
  - On the other hand there is a number of CarSharing-Users reducing public transit usage to nearly nothing
  - Further analysis show that the vast majority of these CarSharing-Users has car-friendly attitudes and did not use Public Transport very often before joining CarSharing Services

Thank you!

-> Contact us for receiving more detailed data on this evaluation!

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