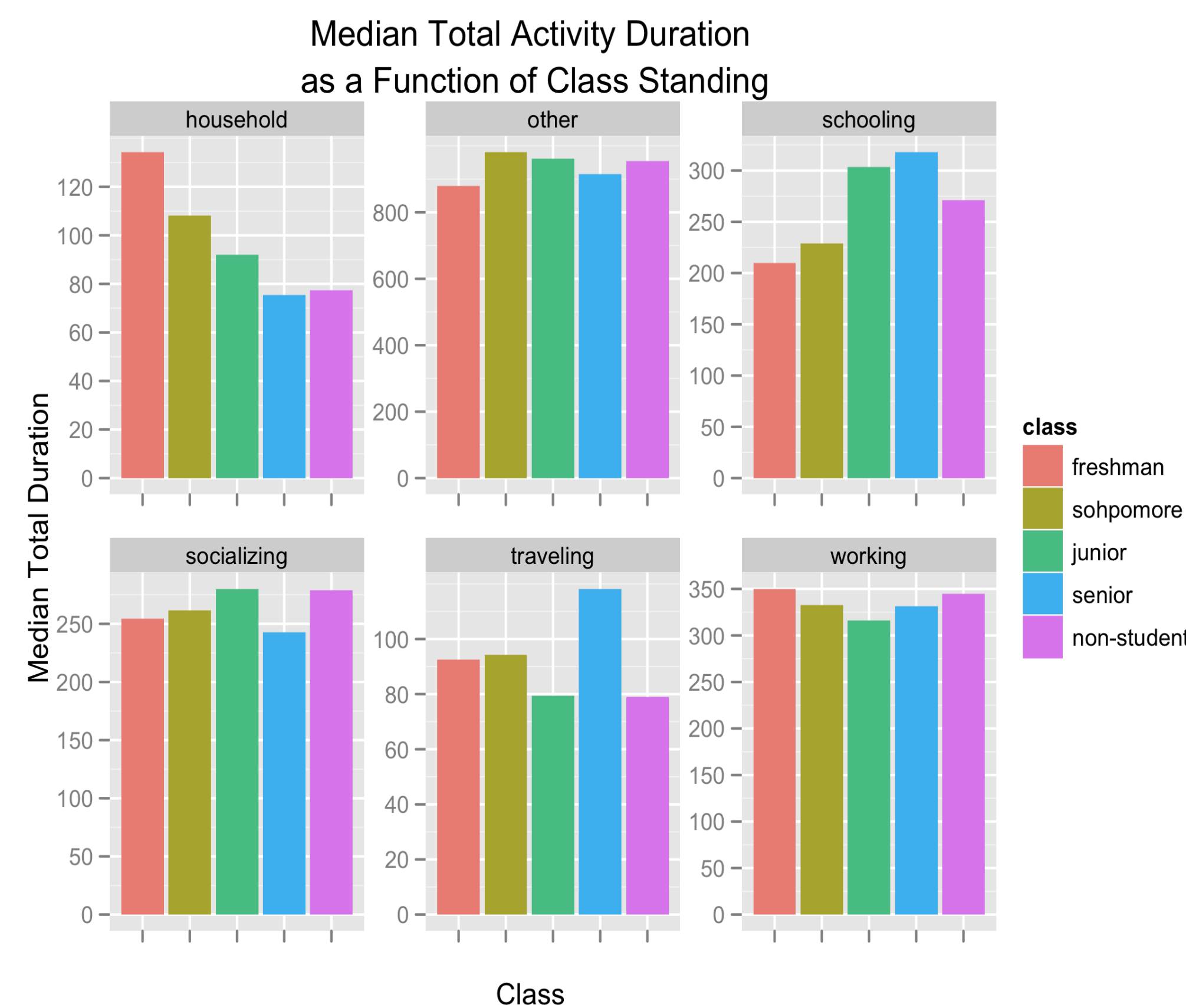




# A Comparative Analysis of Start Time and Total Duration Distributions of Notable Activities by Student Status and Class Standing

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## Analyses of Total Activity Durations by Class Standing

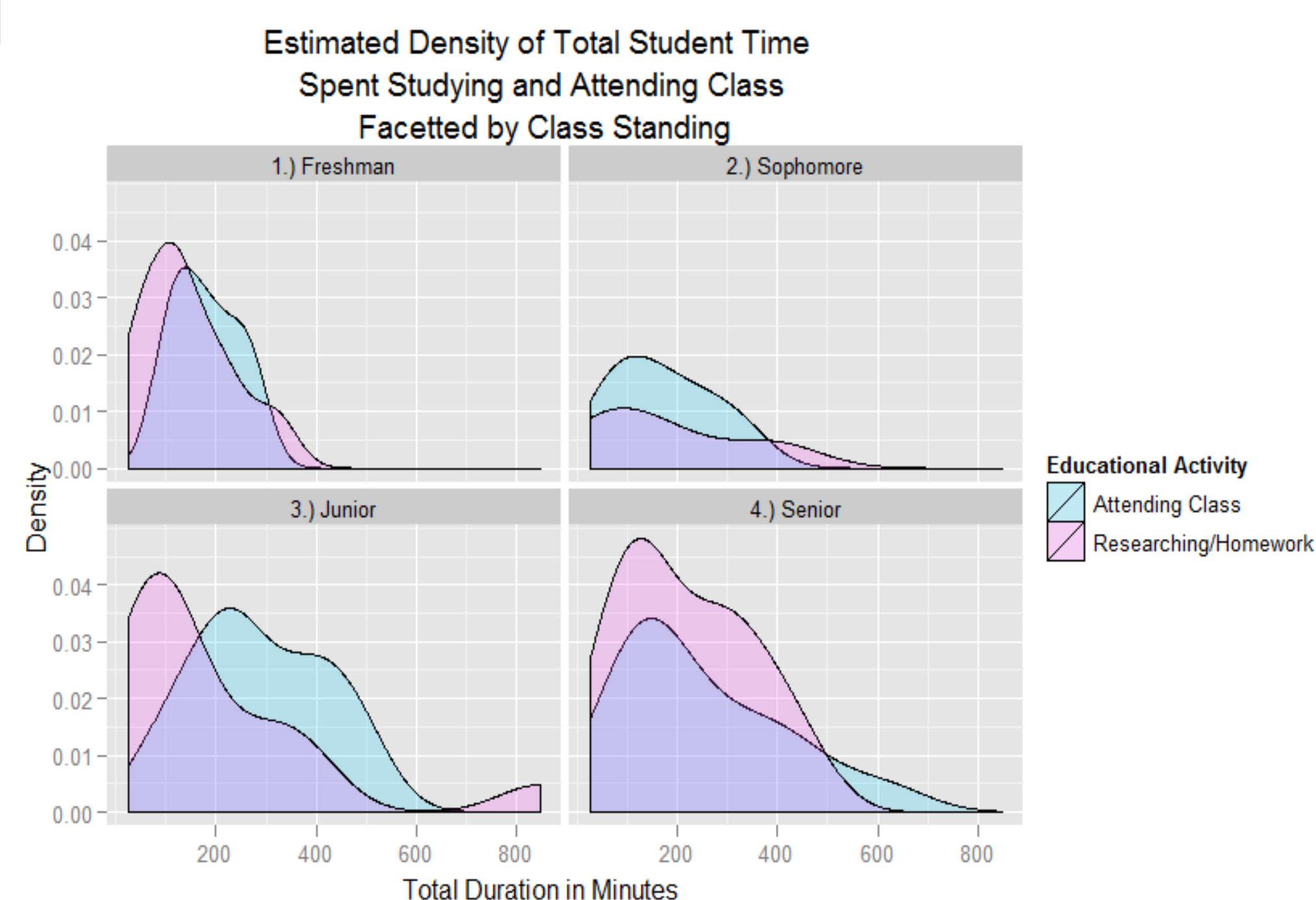


## Median Total Activity Duration by Class Standing

- Median total duration used to control for outliers
- Household activities decline by year
- Schooling activities increase by year
- More time socializing and less time working until senior year
- Seniors spend most time travelling
- Most differences are small and may not be significantly different
- Non-Students appear to follow a similar distribution to students

## Distributions of Total Study & Class Time by Class

- Both time spent attending class and studying/researching increase by year
- Large majority of freshman spent less than 200 minutes on each activity
- As class standing increases duration distributions shift right
- Notice bimodal distributions suggesting existence of two classes
- Heavier right-tail concentration of researching/studying distribution as class year increases
- Time spent attending class appears to drive time spent on HW



## Introduction, Exploratory Analyses, and Conclusions

### Introduction

With more than 70% of recent American high school graduates enrolled in a college or university, a critical analysis of how this large majority of young Americans spent their time was necessary to understand differences in lifestyle/behaviors between young men and women enrolled in higher education and their equally aged, non-enrolled peers. Using the 2009 American Time Use Survey (ATUS) from the Bureau of Labor Statistics, a comparative analysis was made between 18-25 yr old post-secondary students and non-students of similar ages. The investigation, starting with an exploratory analysis of how these two groups partition their day by the different activity types, identified key differences/irregularities, most notably in work and education, and further explored these differences. Lastly, differences in total time spent on various activities by class standing were explored with a concluding focus on educational activities.

### Data Set

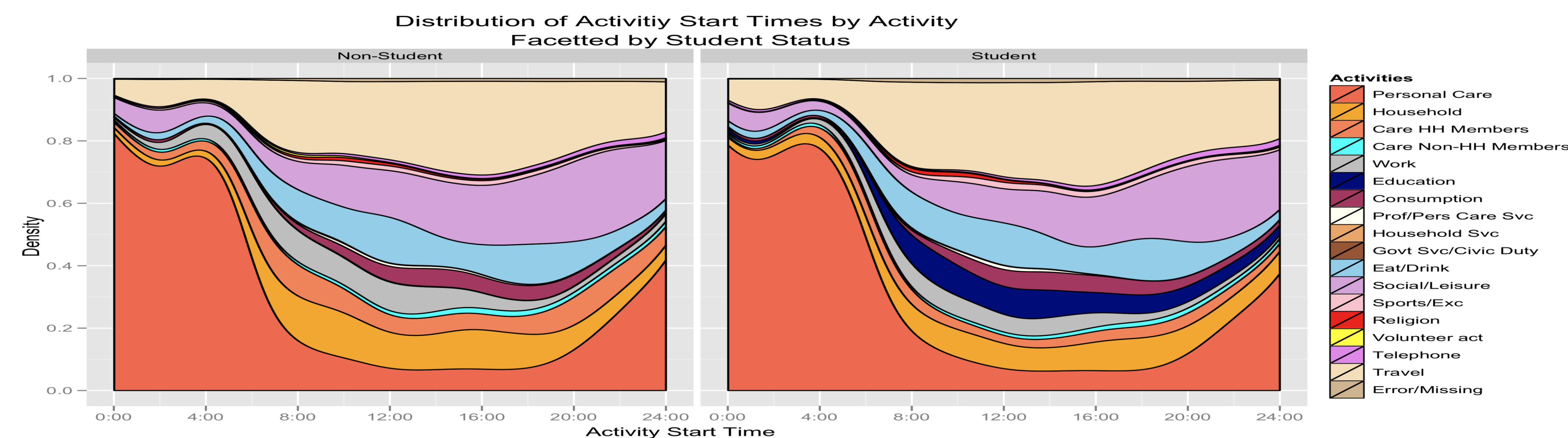
The American Time Use Survey (ATUS) provides nationally representative estimates of how, where, and with whom Americans spend their time. Collecting data from over 98,000 respondents between 2003 and 2009, ATUS represents both a unique and vast collection of valuable non-market data. The ATUS survey, in its entirety, consists of five files: The Respondent File, Roster File, Activity File, Who File, and the Activity Summary File. These files provided case specific, household information, activity specification, activity attendance information, and an activity summary respectively. Additionally the Current Population Survey (CPS) provided critical demographic information for each respondent. Focusing on key demographic indicators such as educational status and employment status, the Respondent File, Roster File, Activity File, and CPS File were joined by the unique respondent ID. The new data set was then divided by student status for analysis.

### Hypotheses

- Non-Students and Part-Time students start work earlier and work more than Full-Time Students
- Non-Students spend more time caring for family
- Part-Time students participate in educational activities later than Full-time students
- Study and class time increase as class standing increases

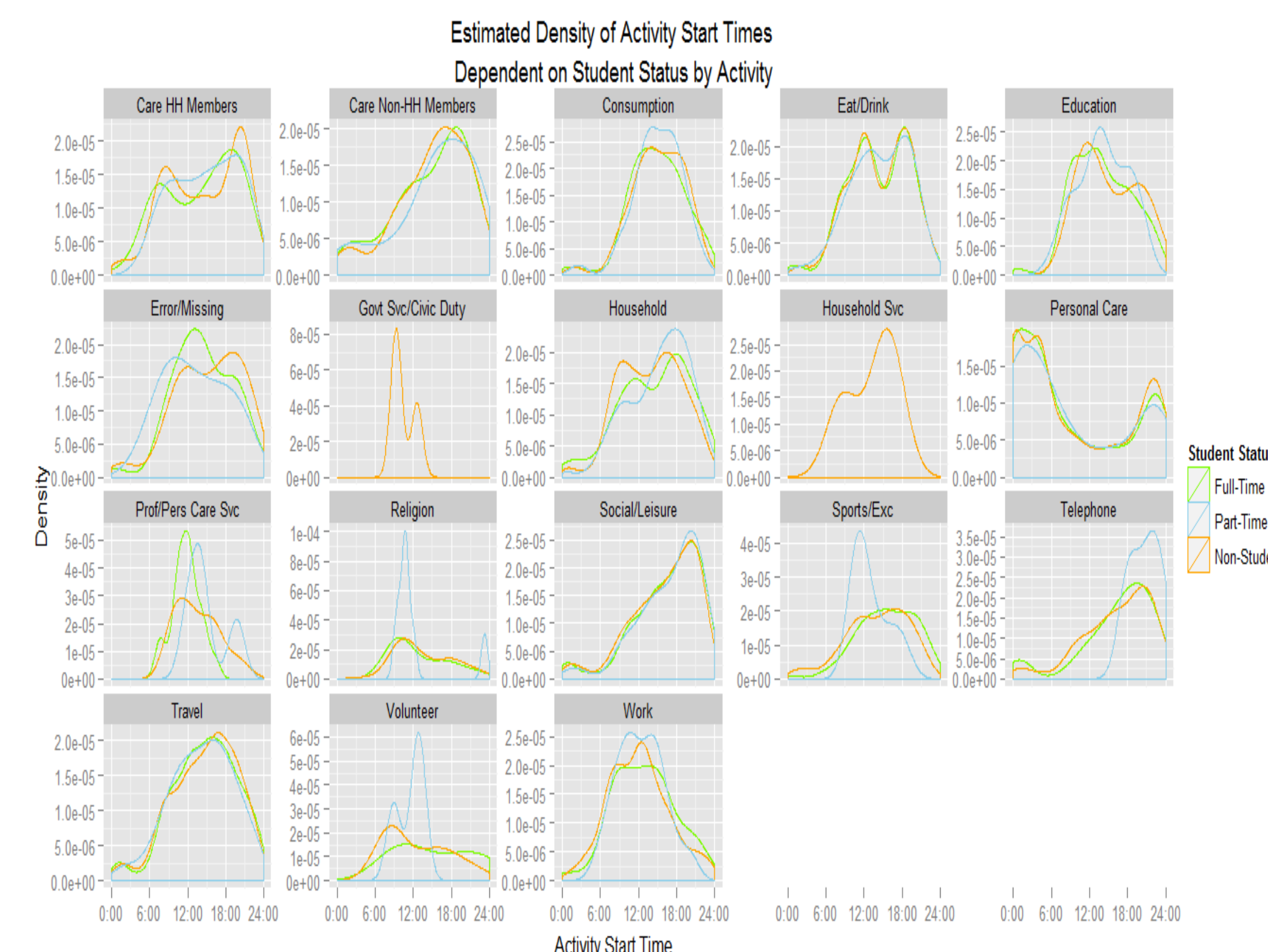
### Conclusion

- Non-Students and Part-time students start work earlier and work more than Full-Time Students
- Non-Students spend more time caring for family and socializing
- Part-Time Students participate in educational activities later
- Study and class time increase as class standing increases
- Students travel more than Non-Students



## Act. Start Time Dist.

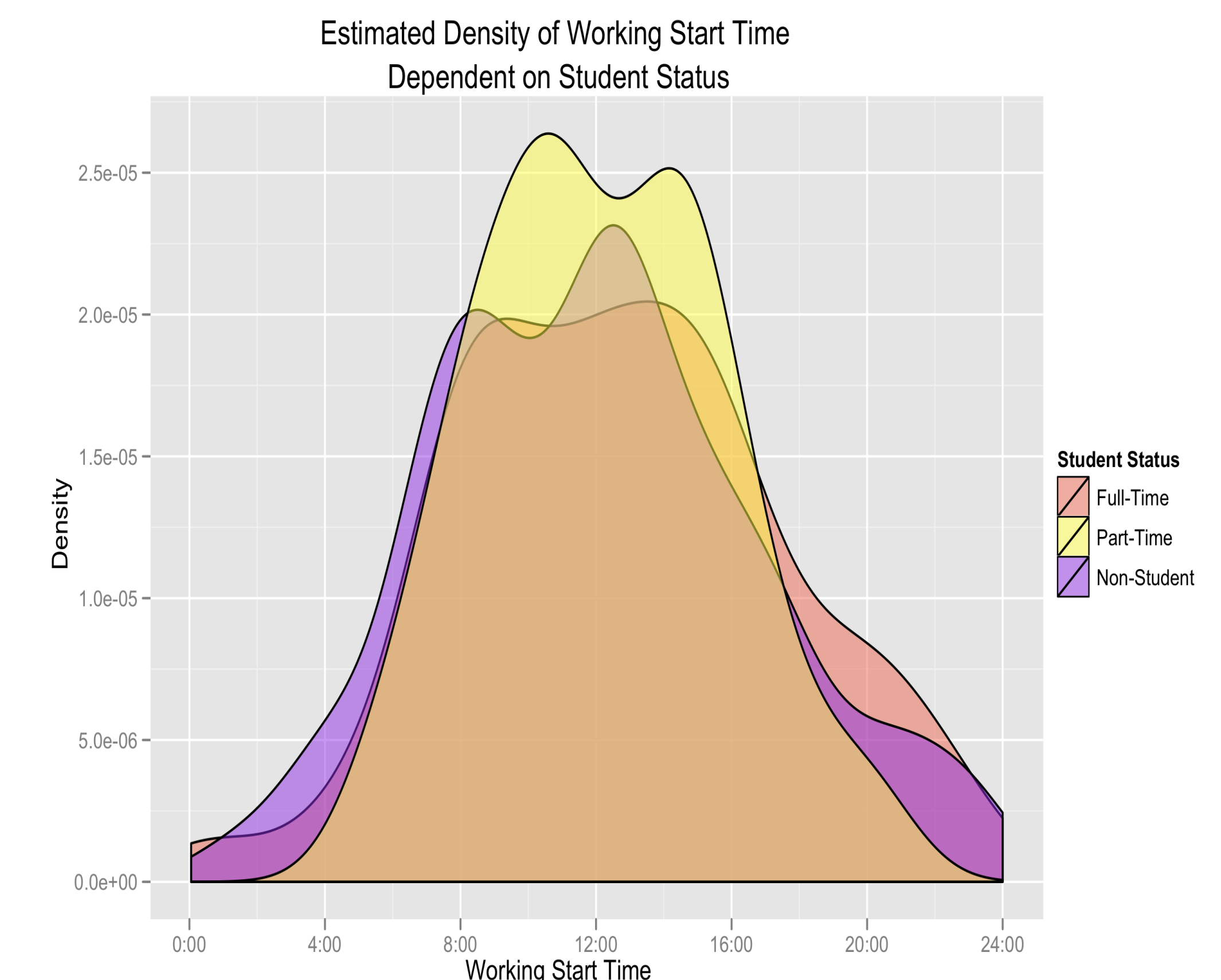
- A non-student is more likely to start sleeping at midnight
- The apparent spike in starting sleeping at 4:00 am results from the recording methodology
- Educational gap for non-students is closed by work and family care
- Students travel more
- Non-students spend more time caring for house, family, and social
- Distributions similar but non-students start earlier



## Act. Start Time Density

- Most people, irrelevant of student status, appear to follow similar distributions for most activities.
- Most notable are differences in education, personal care, prof/pers care, and work activities
- Part-time students appear to differ significantly religious, sport, telephone, and volunteering activities though result of small sample

## Distribution of Work/Educational Start Times by Student Status



## Work Start Time Distribution by Student Status

- Most people, regardless of student status, start work between 8:00 am and 10:00 am.
- Notice apparent bimodal distribution of all densities  
Likely caused by breaking for lunch and returning to work
- Part-Time students appear to be mostly centered with low spread  
However, Full-Time and Non-Students have heavier tails
- While many people work early in day, Non-Students and, more likely, Full-Time students are more prone to start work later

## Educational Start Time Distribution by Motivation

- Part-Time students attend and study for degree courses later than their full time counterparts  
Likely a result of starting work earlier
- For this sample, no Part-Time students spent any time attending or studying for classes taken for personal interest
- The absence of Part-Time students in personal interest classes could be the result of insufficient sample or scheduling conflicts.

