

# Income predictor

Consulting project – Survata

JC Leyder

# Are Belgian beers the best?



- Yes
- No

Continue

# Survata survey

- Gender
  - Age
  - Location (from IP)
- .....

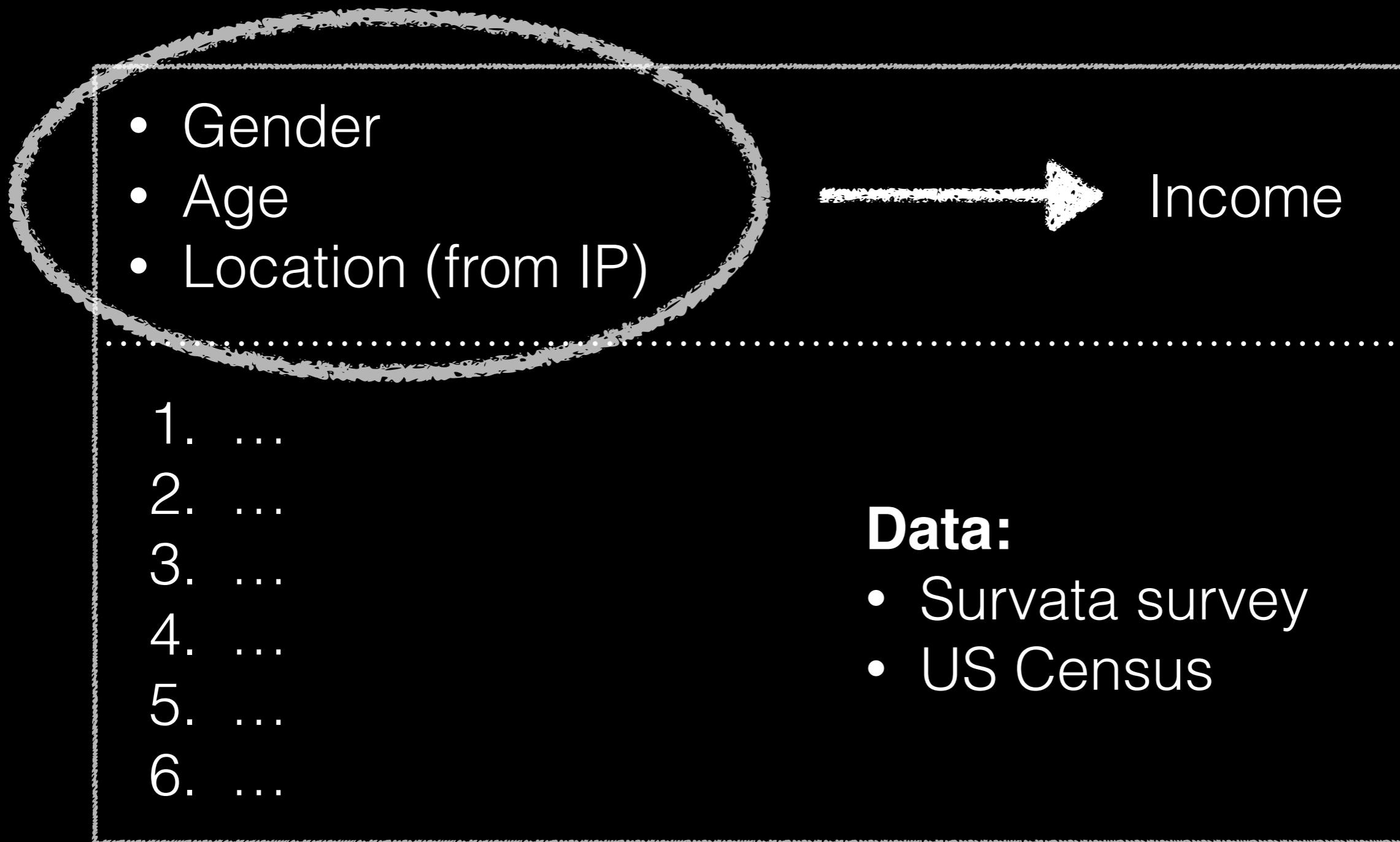
1. ...
2. ...
3. ...
4. ...
5. ...
6. ...

# Survata survey

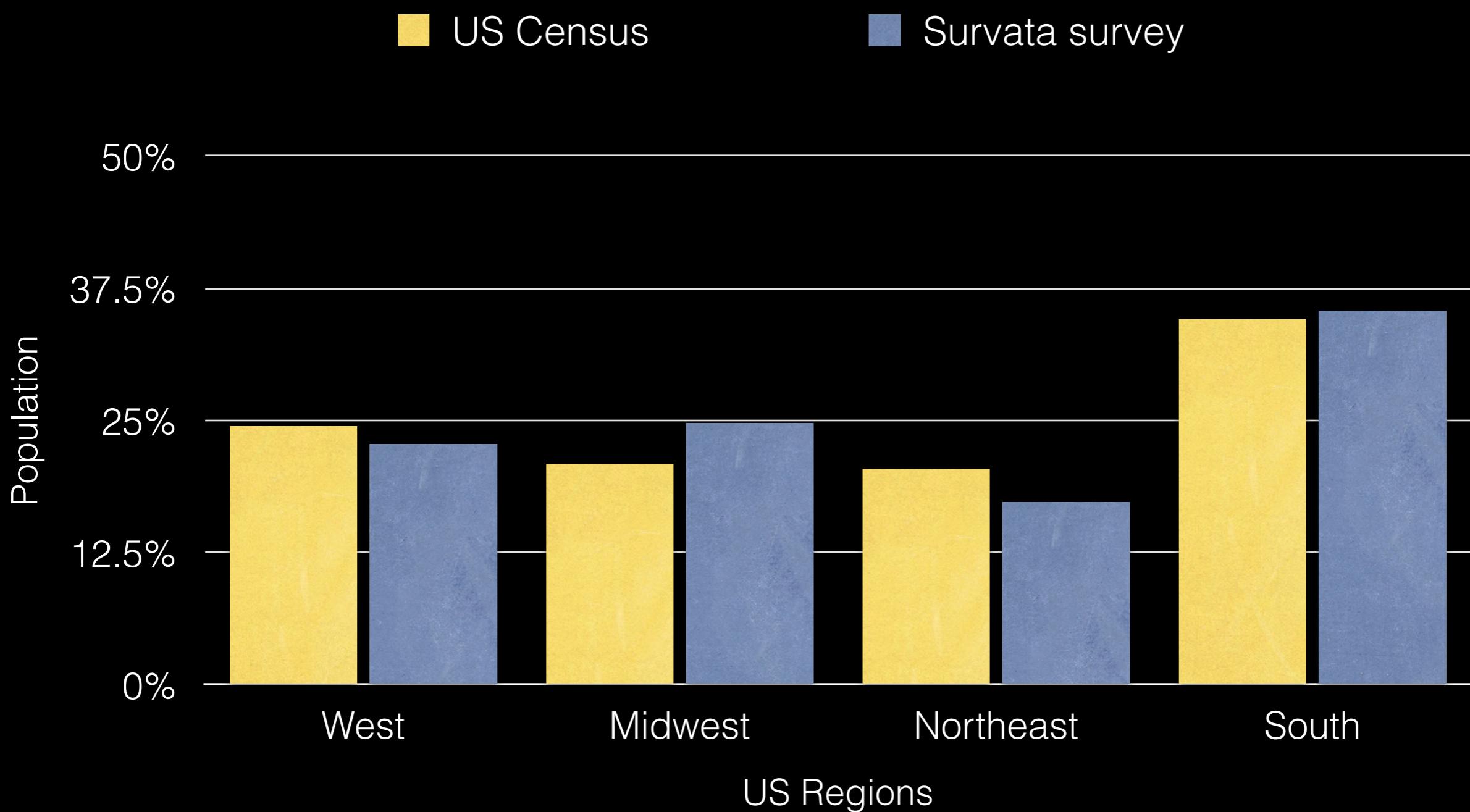
- Gender
  - Age
  - Location (from IP)
- .....

1. Income
2. ...
3. ...
4. ...
5. ...
6. ...

# Survata survey



# US Census & Survata



# Algorithm

## **Input:**

- Age (categories)
- Zip code
- Gender

## **Prediction:**

- Income (categories)

## **Classifier:**

Random Forest Classifier

# Algorithm

## **Input:**

- Age (categories)
- Zip code
- Gender
- **OS/Browser**

## **Prediction:**

- Income (categories)

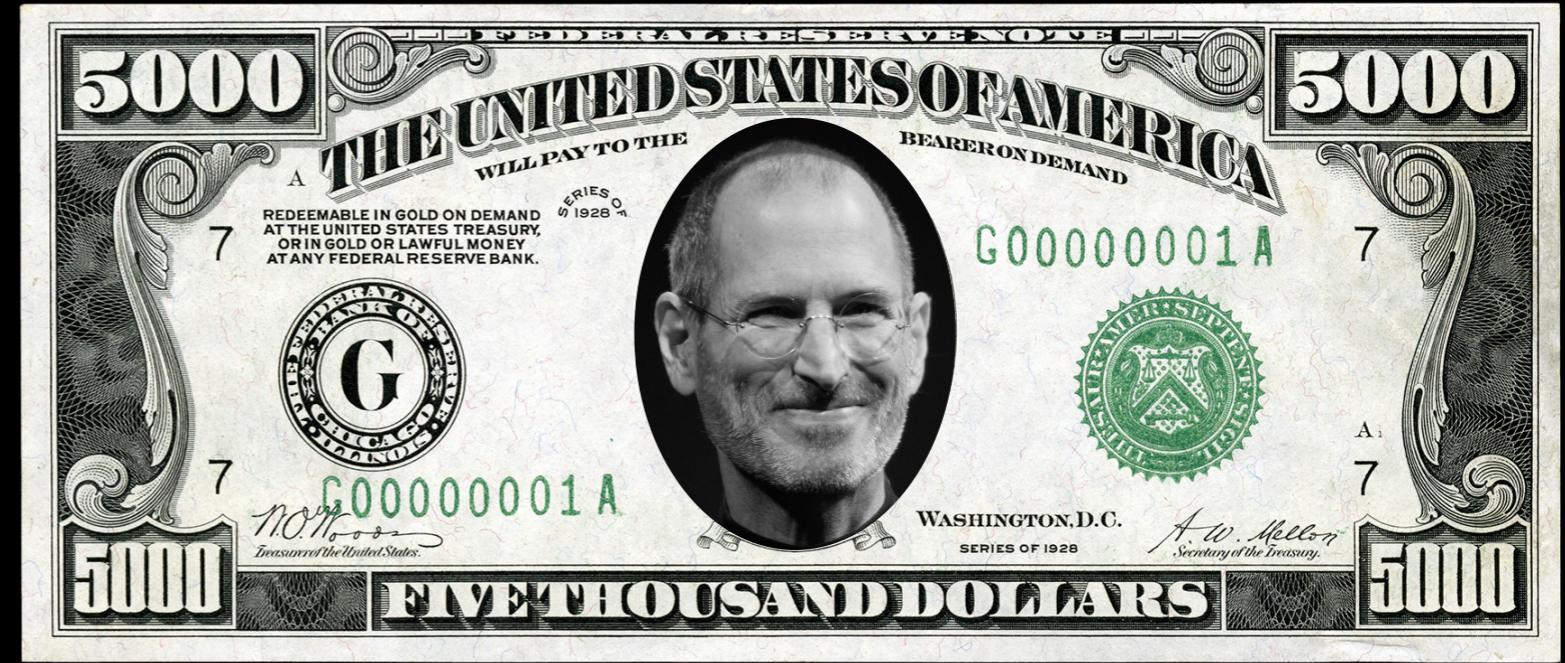
## **Classifier:**

Random Forest Classifier

# Algorithm

## Input:

- Age (categories)
- Zip code
- Gender
- **OS/Browser**



## Prediction:

- Income ⇒ **new categories**

## Classifier:

Random Forest Classifier

# New income survey

**Survata** 415-745-8833 HELP ? MY ACCOUNT JC LEYDER ▾

JC LEYDER - INCOME - NEW SURVEY (SURVEY ID 67444A03) RUNNING

Analyst reviewing survey Review + approve survey **Collecting results** Analyze your results!

**Survey Design** approved

Attachments

**Results** 2271/4000 - 57% **Approved**

Estimated completion date: Feb 1, 2016

Full response data, including open-ended responses and respondent demographics, will be available for download upon survey completion.

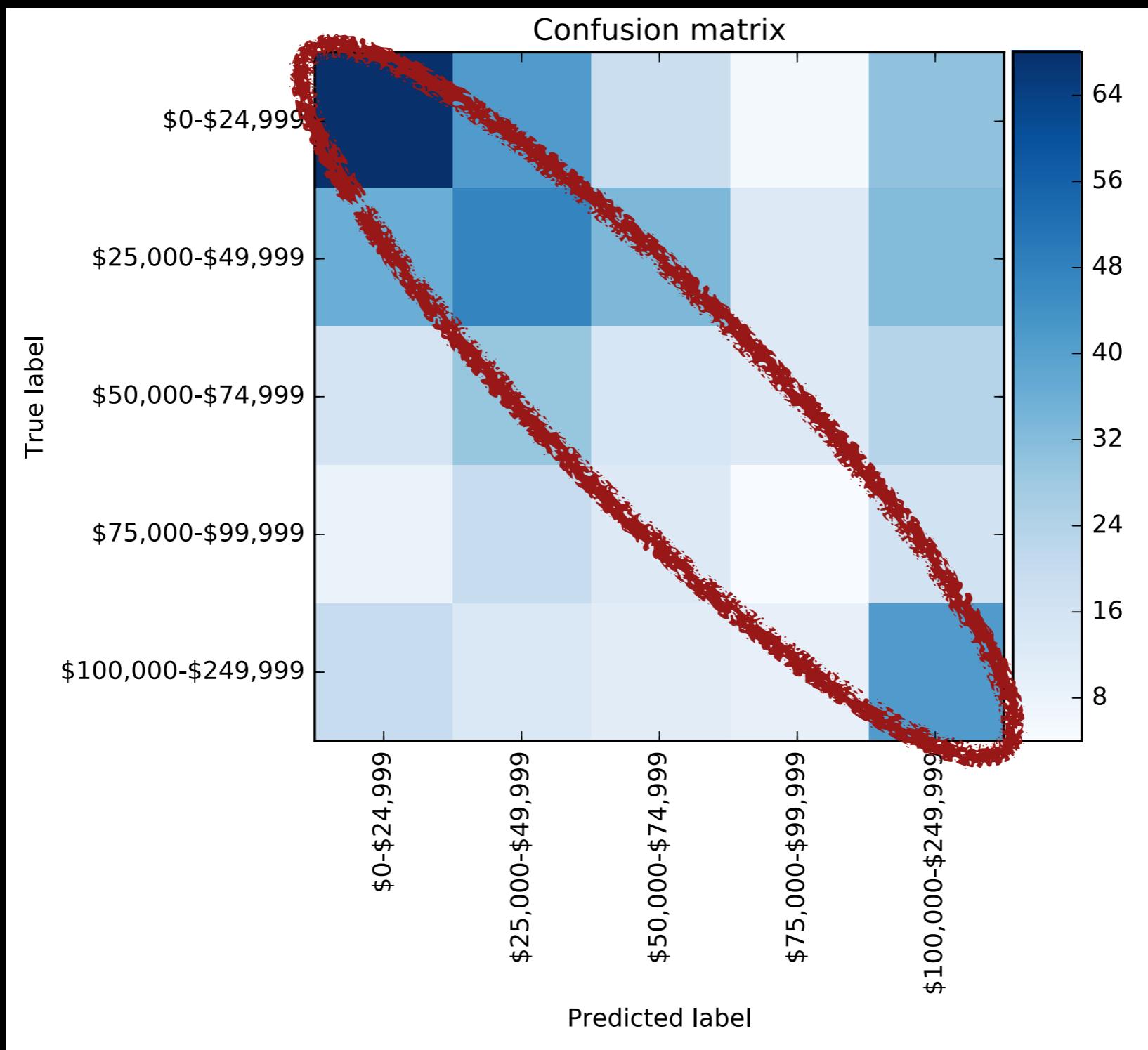
**Question #1**

What is the highest level of education you have attained?

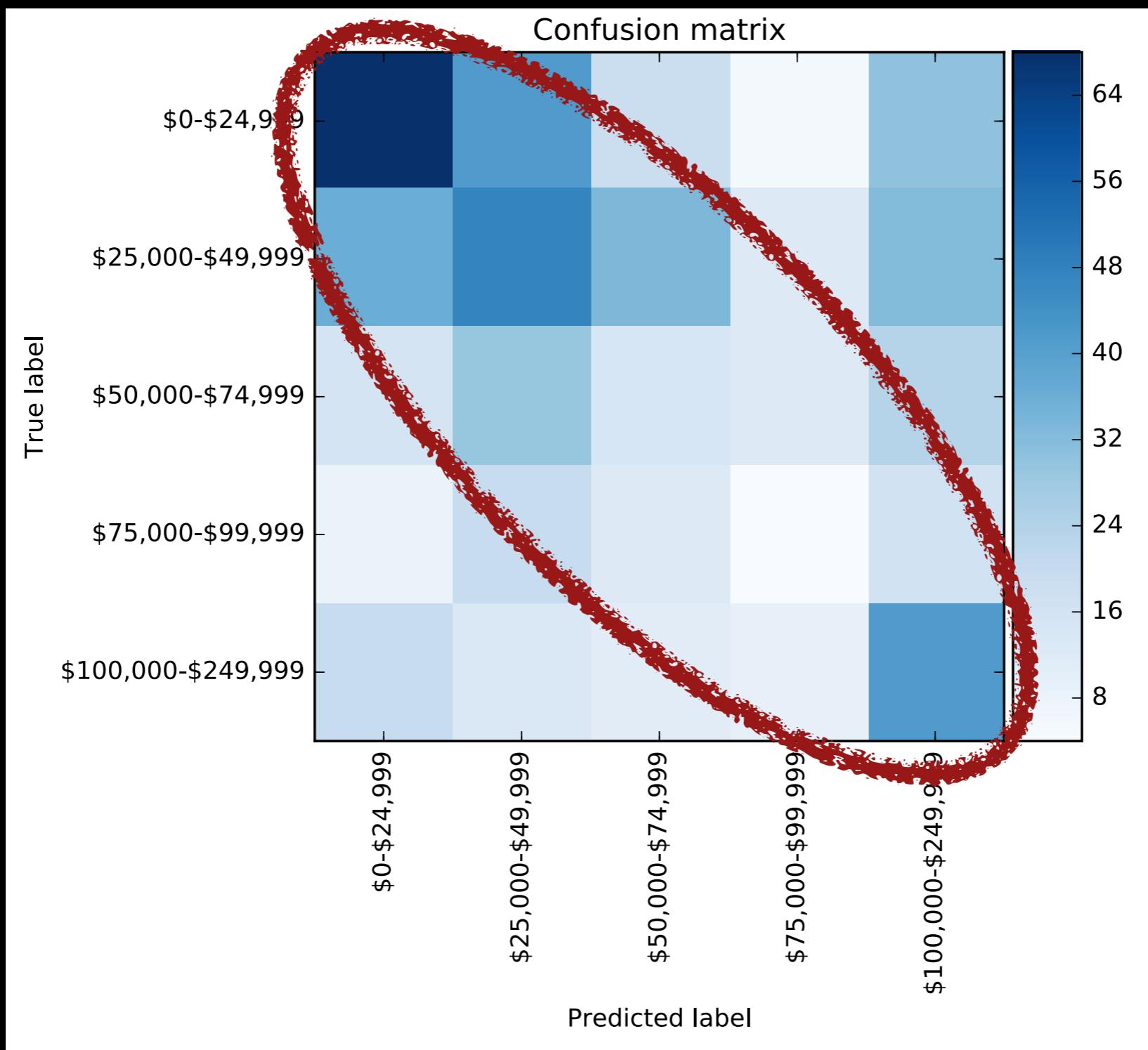
A bar chart titled "What is the highest level of education you have attained?". The y-axis is labeled "Number of responses" and ranges from 0 to 600. The x-axis lists eight categories of education. The bars are colored as follows: Some high school (blue), High school graduate (dark grey), Some college, no degree (green), Associate's degree (orange), Bachelor's degree (pink), Master's degree (yellow), Professional degree (purple), and Doctoral degree (teal). The chart shows that the most common education level is "Some college, no degree" at 567 (25.0%), followed by "High school graduate" at 266 (11.7%).

| Education Level         | Number of Responses | Percentage |
|-------------------------|---------------------|------------|
| Some high school        | 266                 | 11.7%      |
| High school graduate    | 567                 | 25.0%      |
| Some college, no degree | 262                 | 11.5%      |
| Associate's degree      | 78                  | 3.4%       |
| Bachelor's degree       | 345                 | 15.2%      |
| Master's degree         | 146                 | 6.4%       |
| Professional degree     | 107                 | 4.7%       |
| Doctoral degree         |                     |            |

# Accuracy



# Accuracy



# JC Leyder

