



Physics Graduate Student Compensation

Patrick Mulvey
Assistant Director, Higher Education Research
AIP Statistical Research

www.aip.org

National Academy of Sciences
Board on Physics and Astronomy
5/8/2024

Source of Data: AIP Census of Physics and Astronomy Departments

- 209 PhD-granting physics departments (AY 2022-2023)
 - ~ 75% are at public institutions
 - ~ 75% are at R1 institutions
 - ~ 50% Have graduate student unions
 - ~10% were in the process of unionizing (2023)

- Focus primarily on:
 - First-year graduate student Teaching Assistantships (TA) stipends
 - Fifth-year graduate student Research Assistantships (RA) stipends
 - Living Wage comparisons (LW)

Stipend Questions:

- “What is the typical academic year (9 months) stipend offered to full-time graduate students?”
- “What is the typical summer (3 months) stipend offered to full-time graduate students?”

Usable Responses:

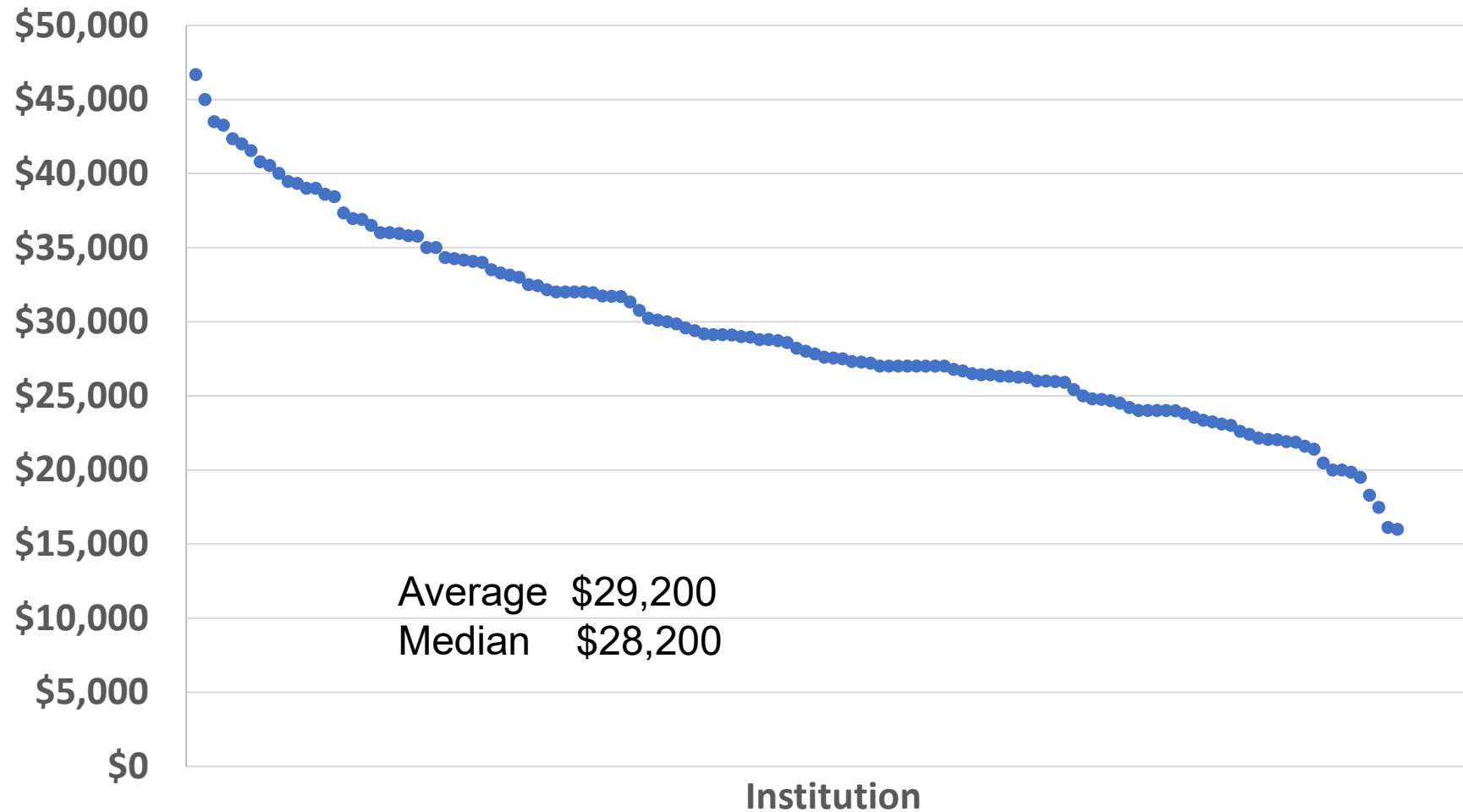
- TA Stipend data for 131 departments (63%) (1st year students)
- RA Stipend data for 109 departments (52%) (5th year students)

Keep in mind when thinking about student compensation

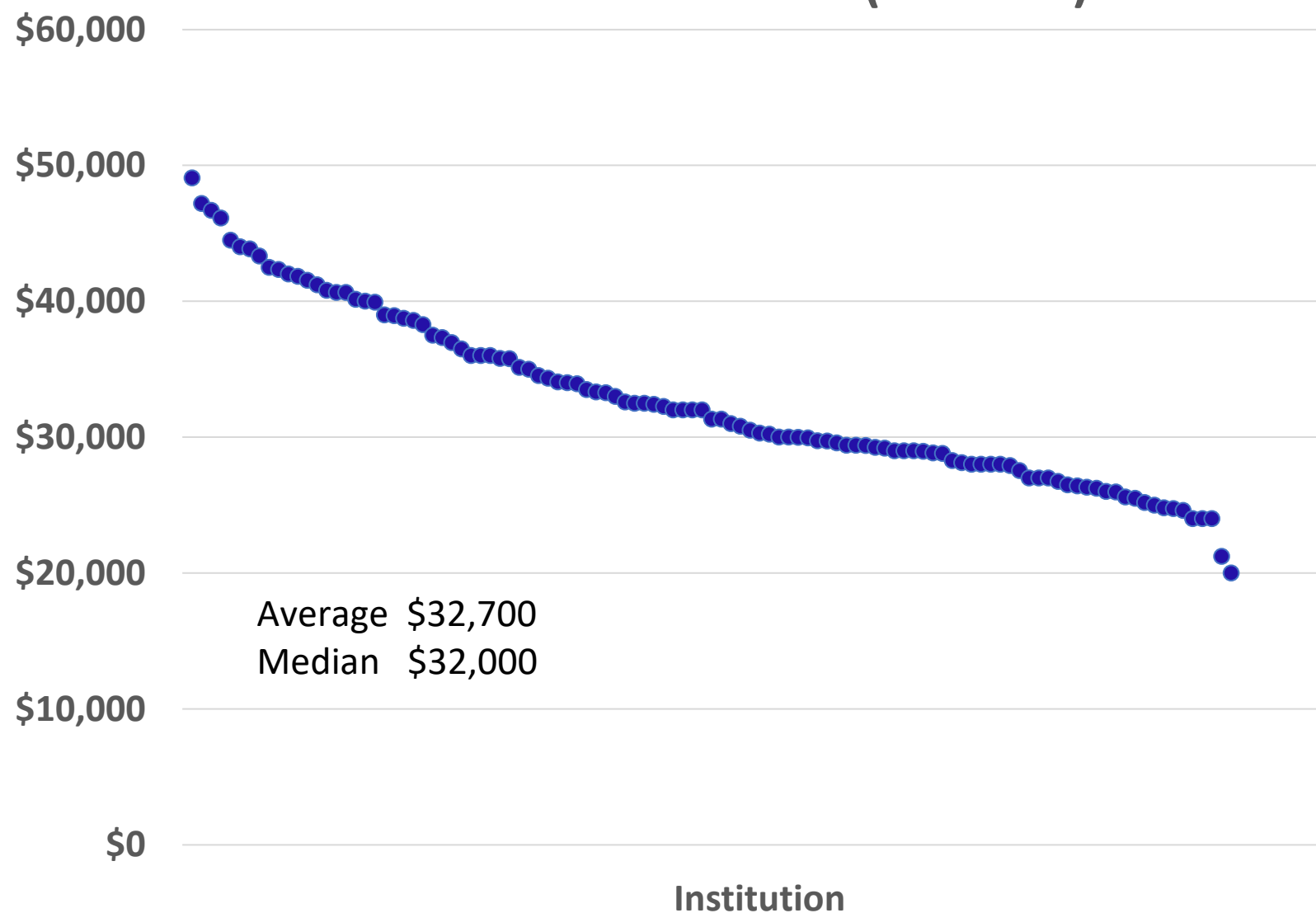
- TAs - Typically work 15-20 hours a week
- RAs - Typically work 30-40 hours a week
- Almost all departments provide a full tuition waiver to full-time PhD students
- Almost all departments offer a health insurance package to full-time PhD students

- Graduate student stipend amounts, and other benefits, are frequently set at the college or university level
- How compensation packages are structure can vary greatly between departments

First-Year **Teaching Assistantship** Stipends 12 Month Academic Year (2022-23)



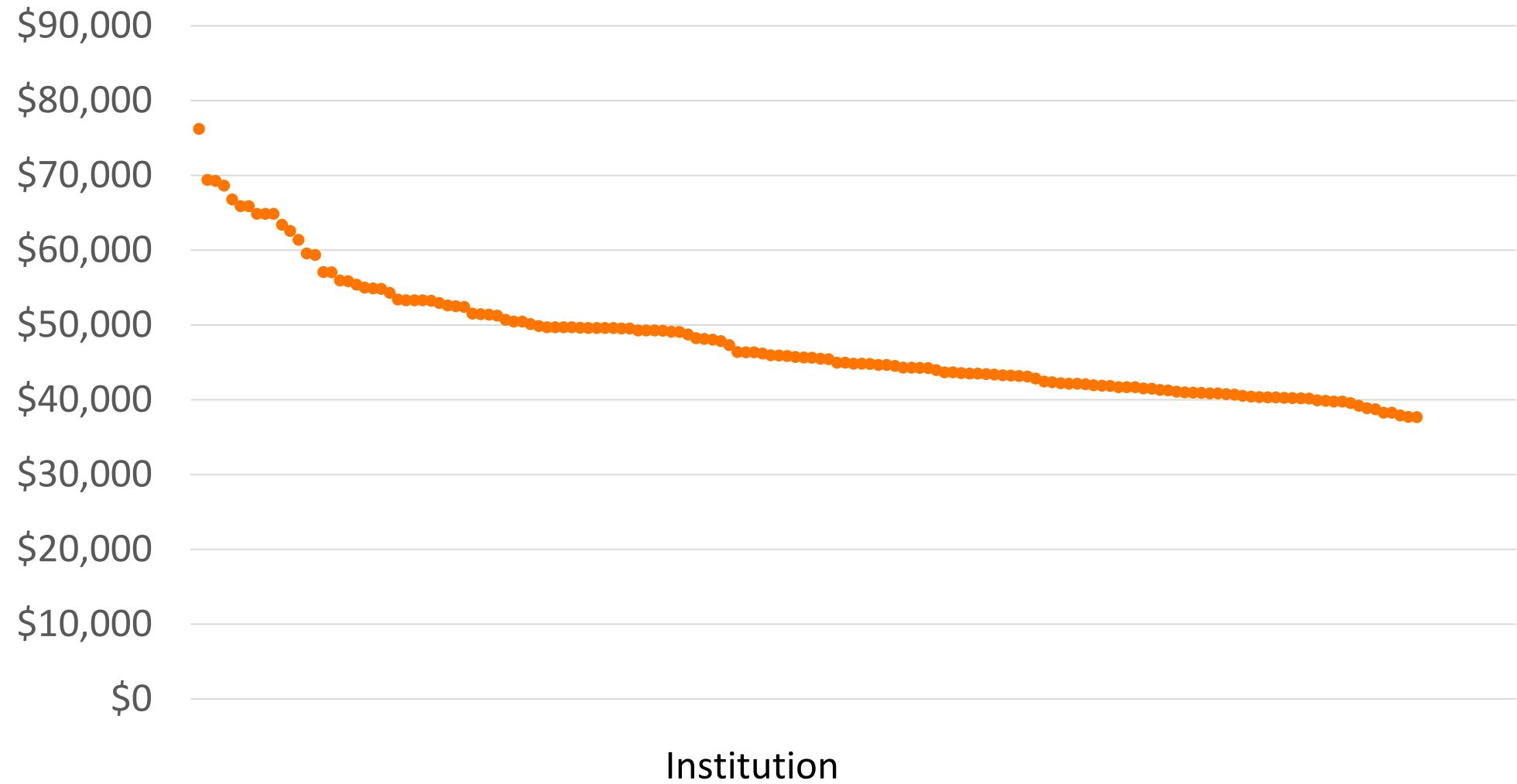
Fifth-Year **Research Assistantship** Stipends 12 Month Academic Year (2022-23)



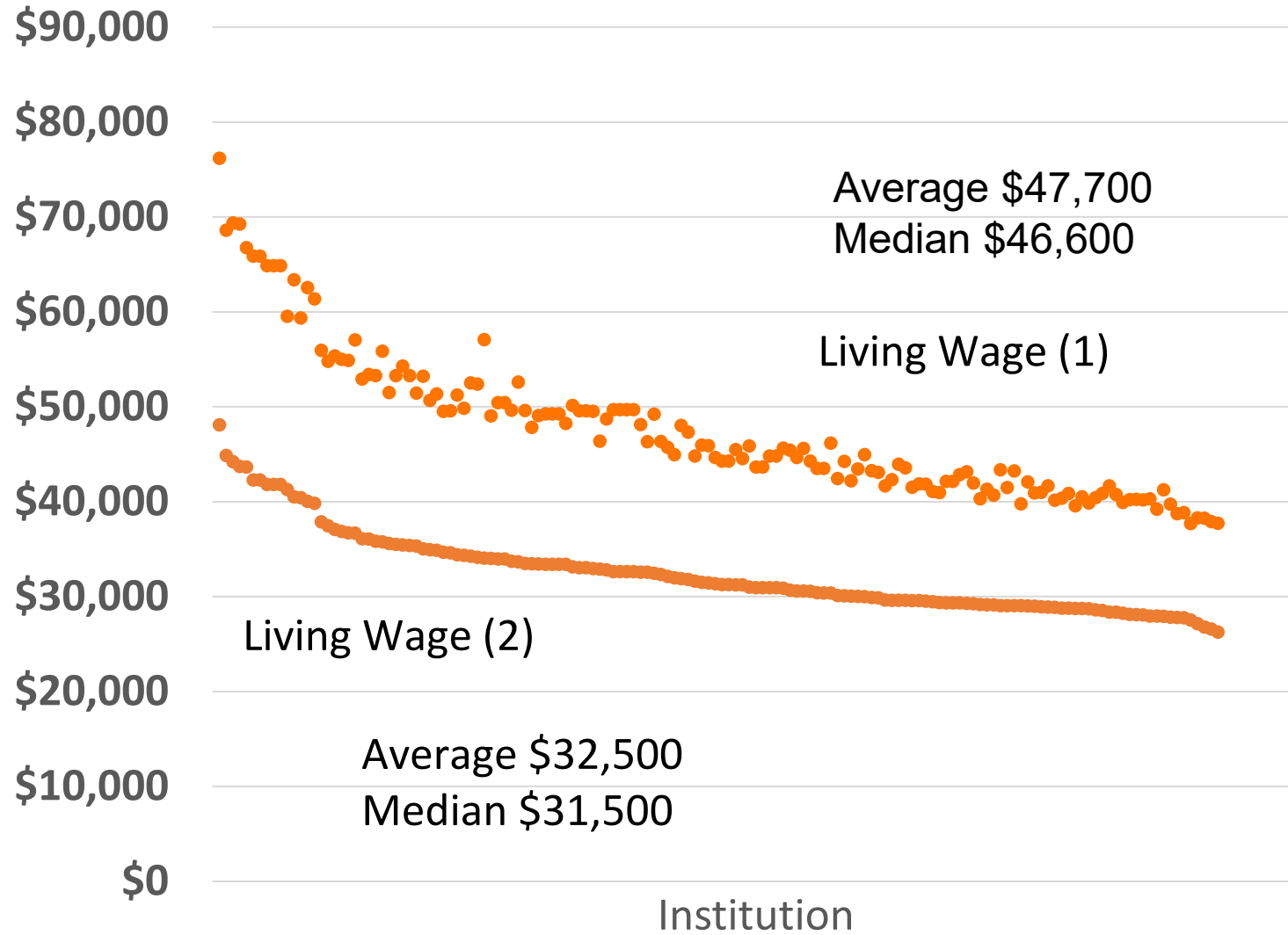
Living Wage

- Living Wage Calculator, Is a resource developed by Dr. Amy K. Glasmeier at MIT (<https://livingwage.mit.edu/>) Updated February 14, 2024. (Stipend data is from 2023 - 2024 AY)
- It provides estimates of the household income needed to meet basic needs such as housing, food, healthcare, and other essentials
 - Without relying on public assistance programs or other sources of income.
- The calculator takes into account geographic variations in the cost of living.
- Living Wage (1): Single income, no children
- Living Wage (2): Two incomes, no children, shared living expenses

Living Wage (1)



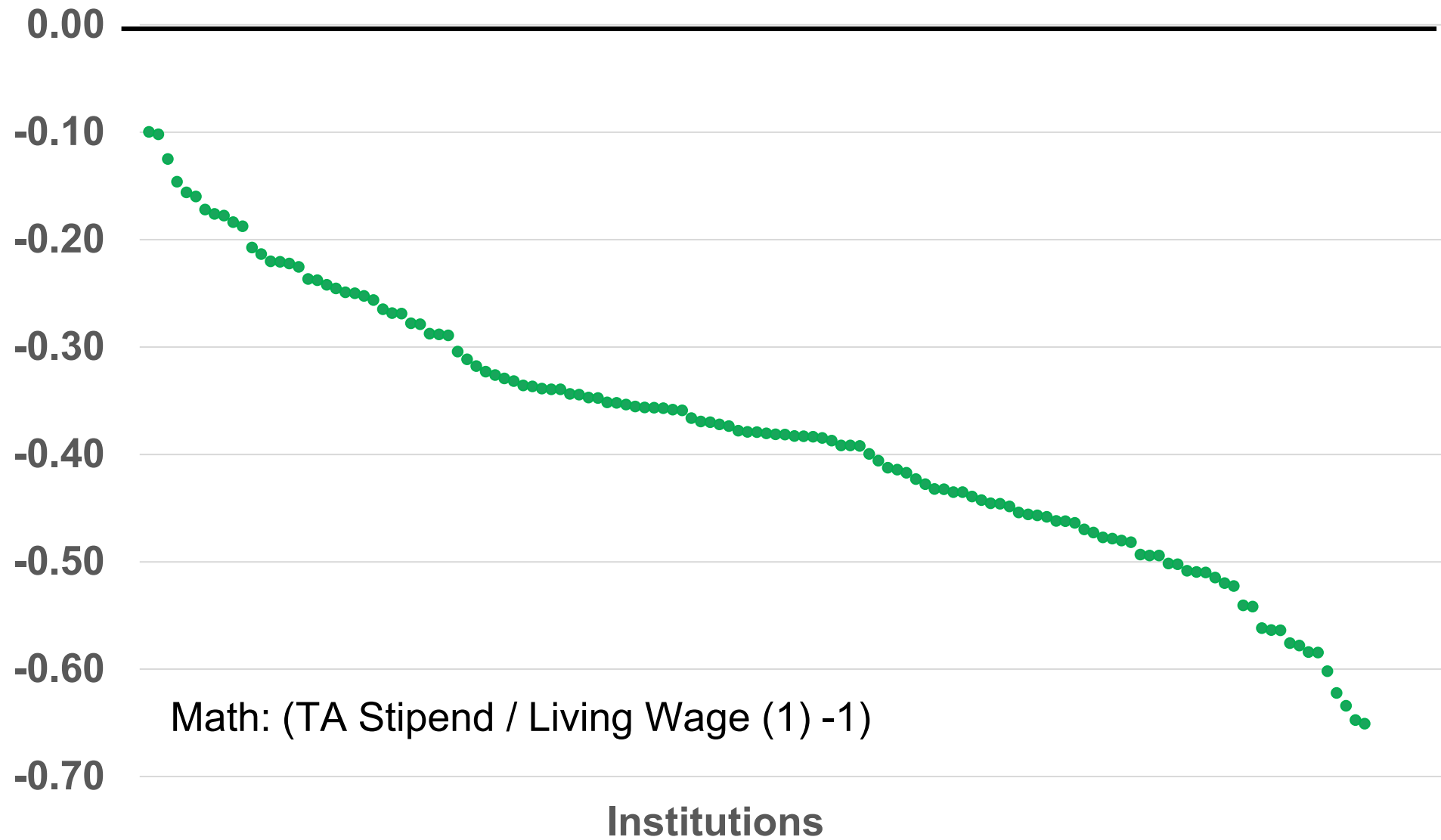
Living Wage (1) vs. Living Wage (2)



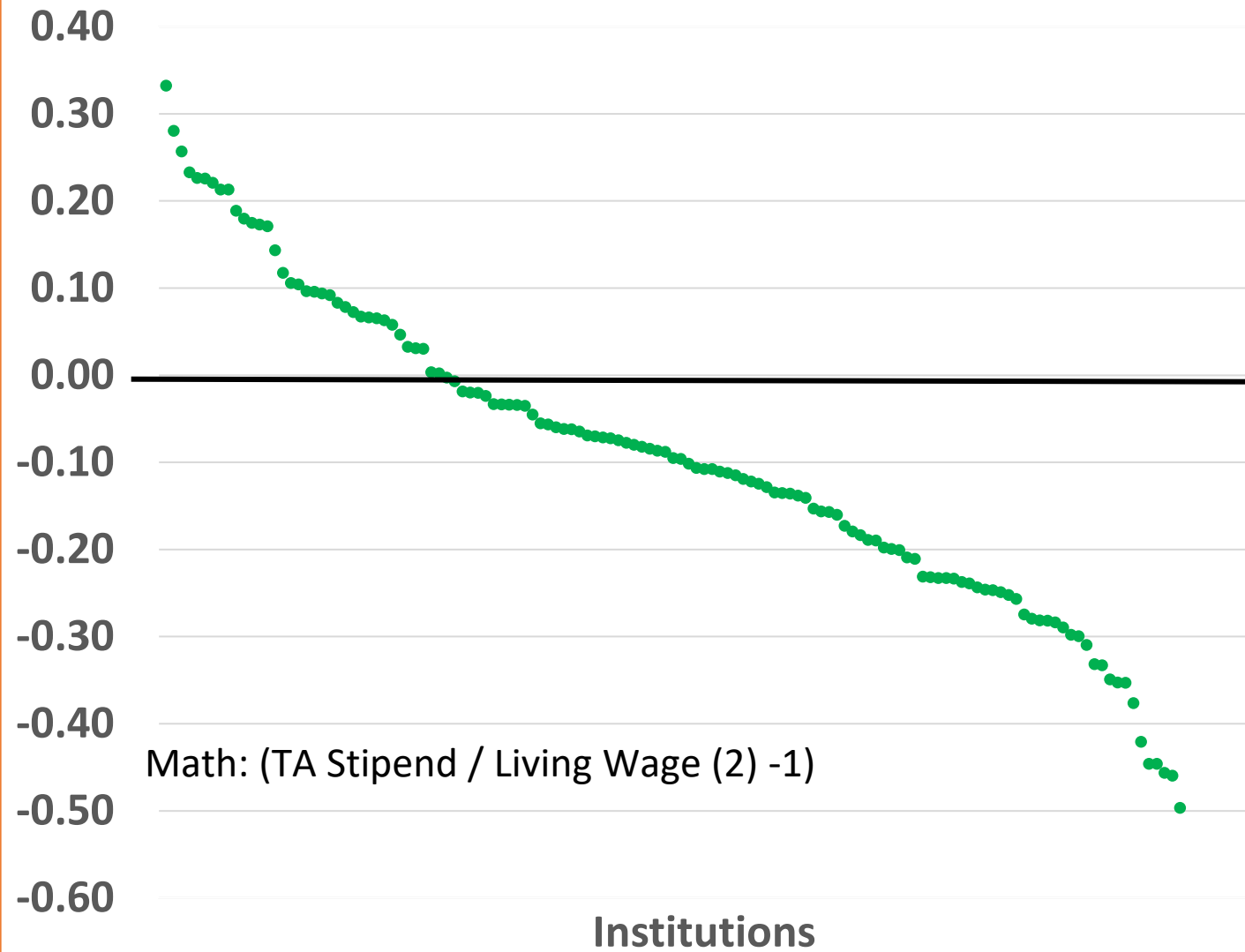
Living Wage (1) vs. Minimum Wage



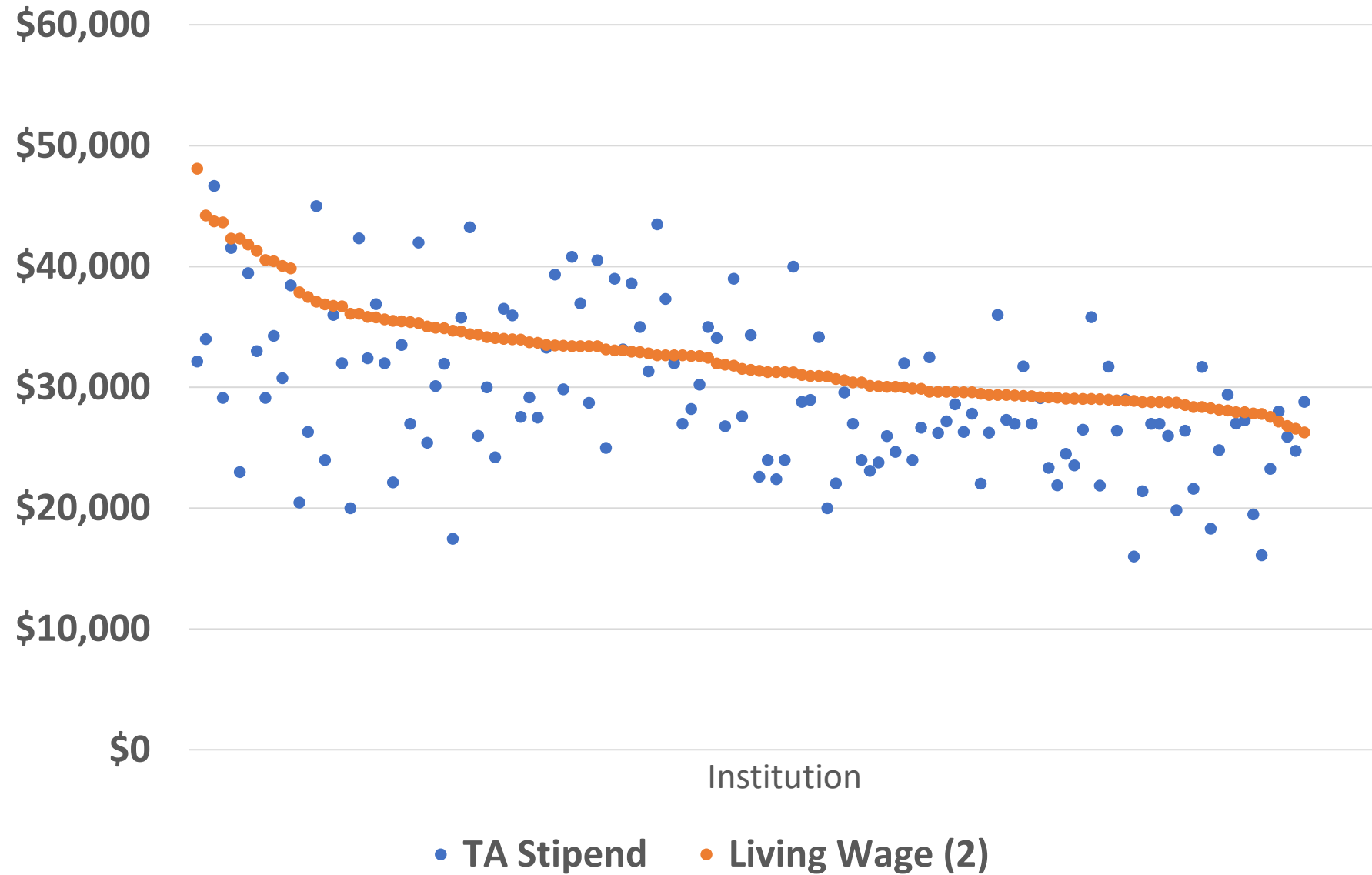
Ratio TA Stipend vs. Living Wage (1)



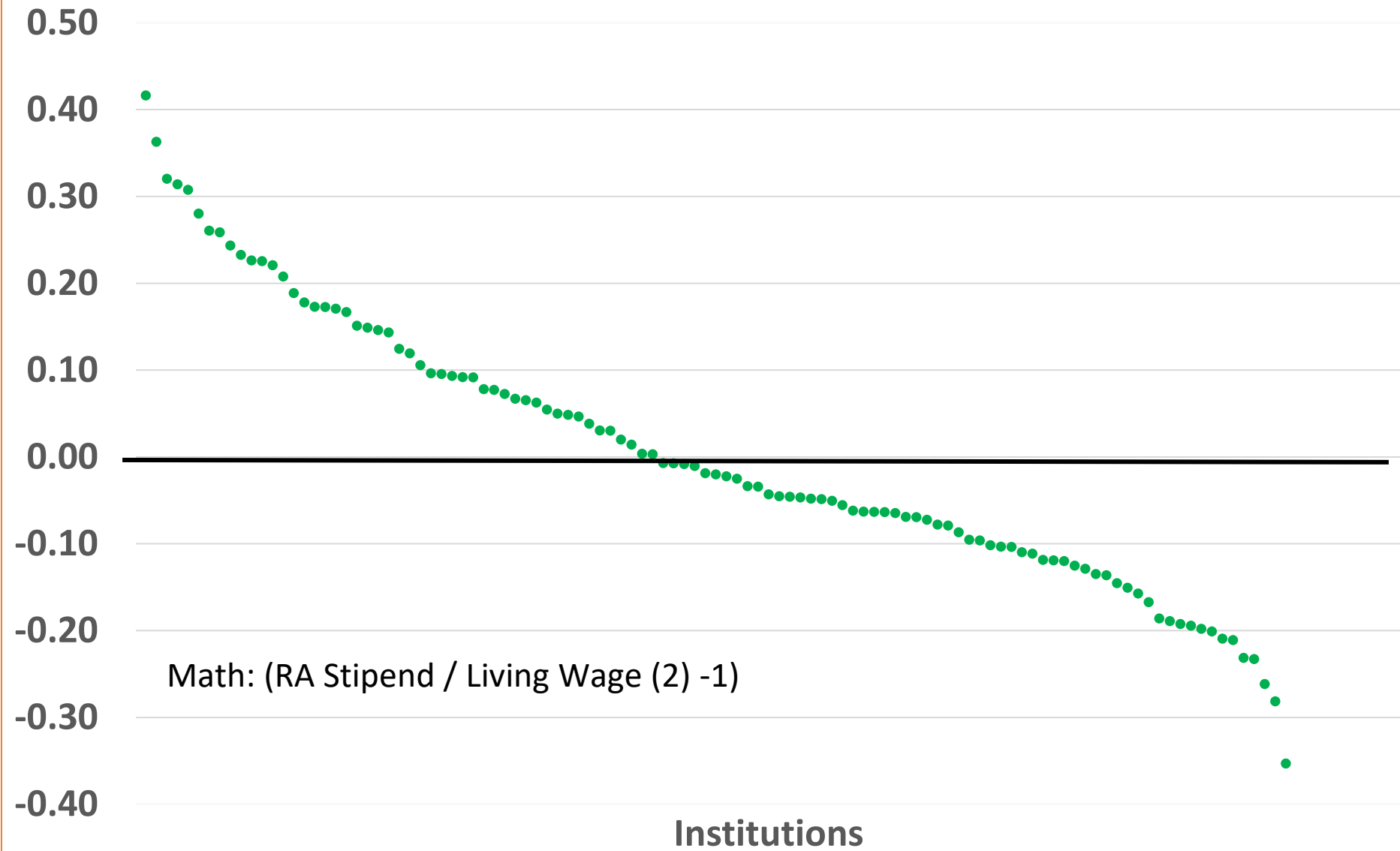
Ratio TA Stipend vs. Living Wage (2)



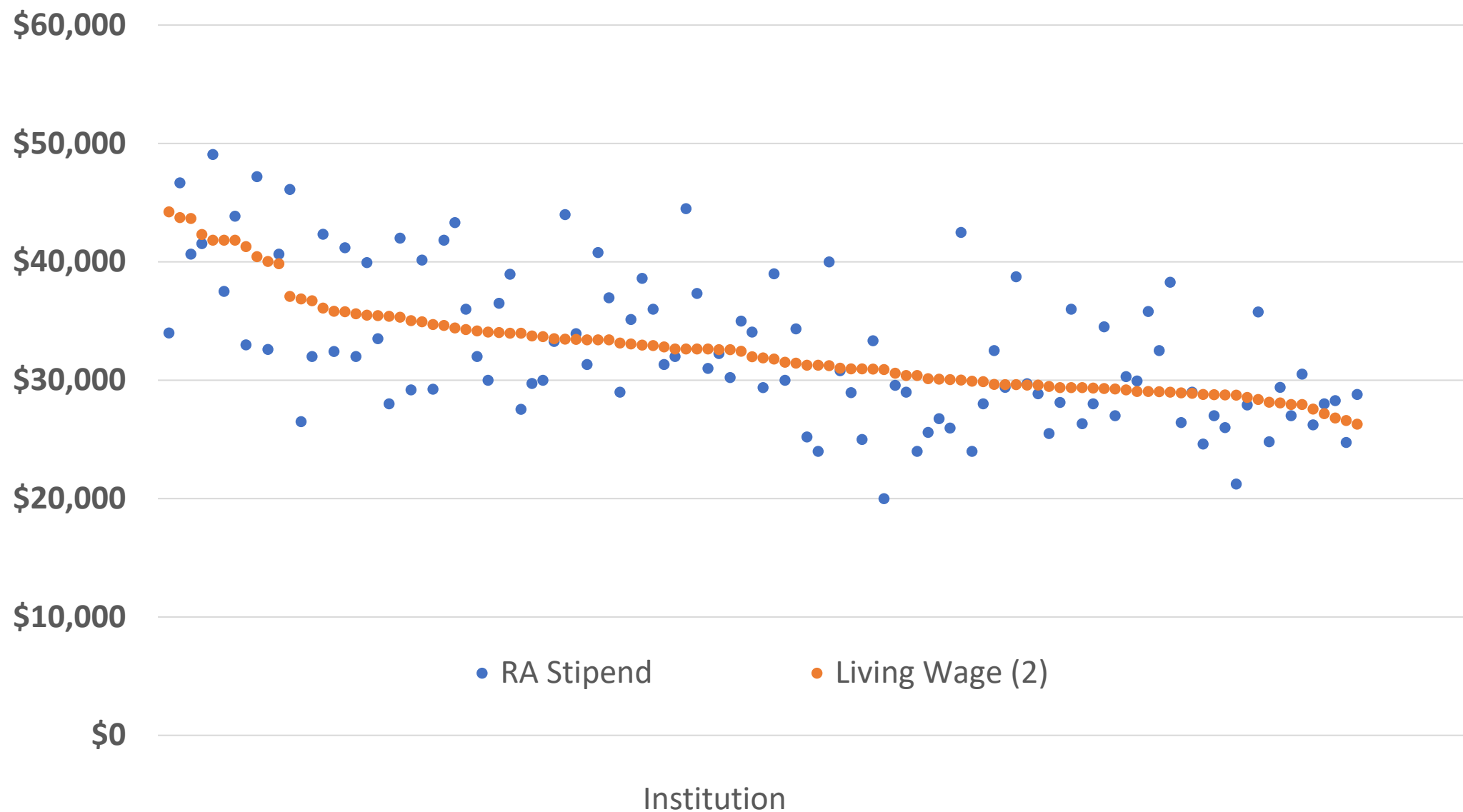
Living Wage (2) and TA Stipend



Ratio RA Stipend vs. Living Wage (2)



Living Wage (2) and RA Stipend



Public vs. Private

Average 1st Year Student TA Stipend

Private	\$ 36,200
Public	\$ 27,300

Average 5th Year Student RA Stipend

Private	\$ 38,100
Public	\$ 30,500

Carnegie Classification

R1	\$ 30,400
R2	\$ 26,600

R1	\$ 33,600
R2	\$ 30,100

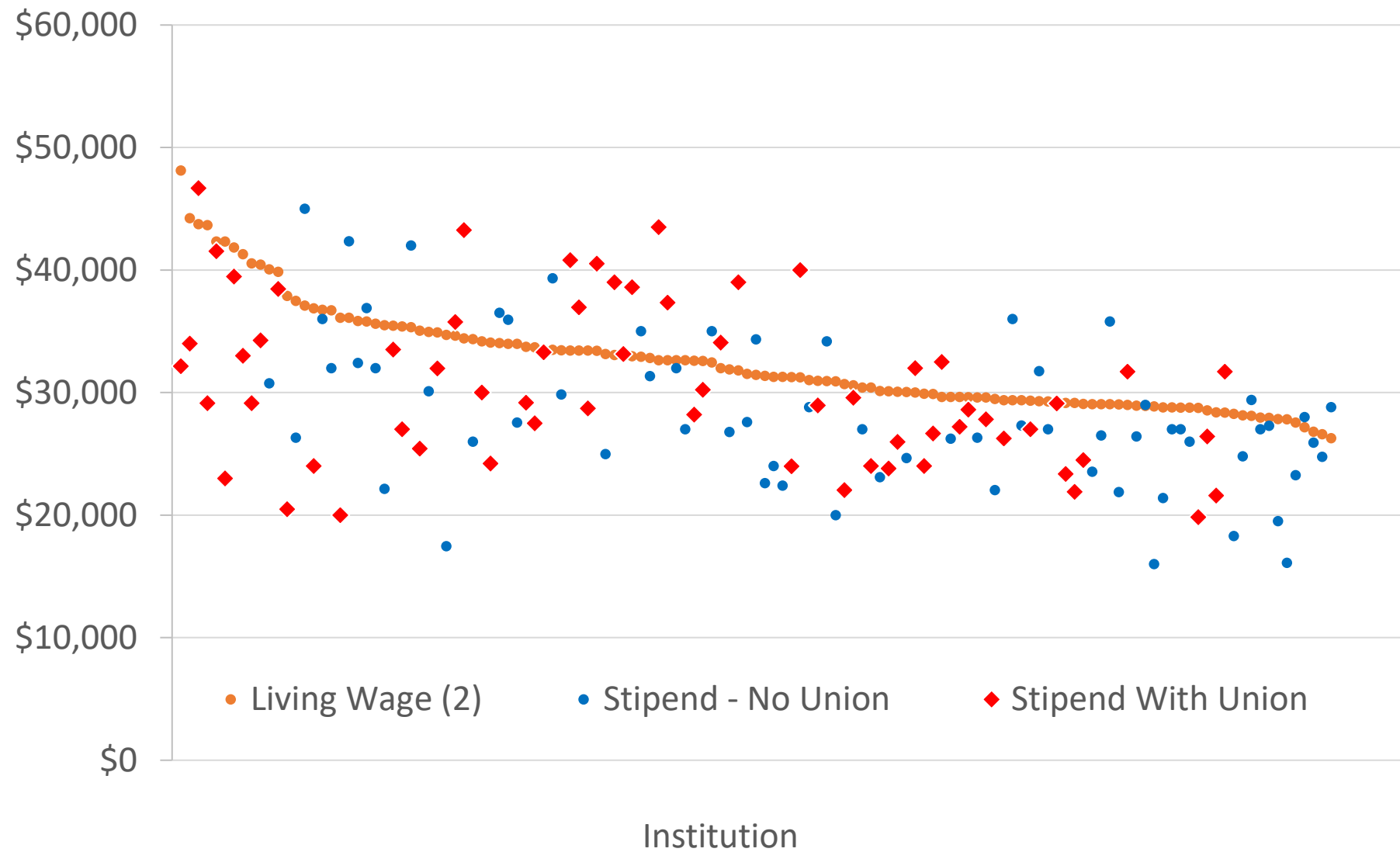
Unions

~ 50% (~60%) Have graduate student unions

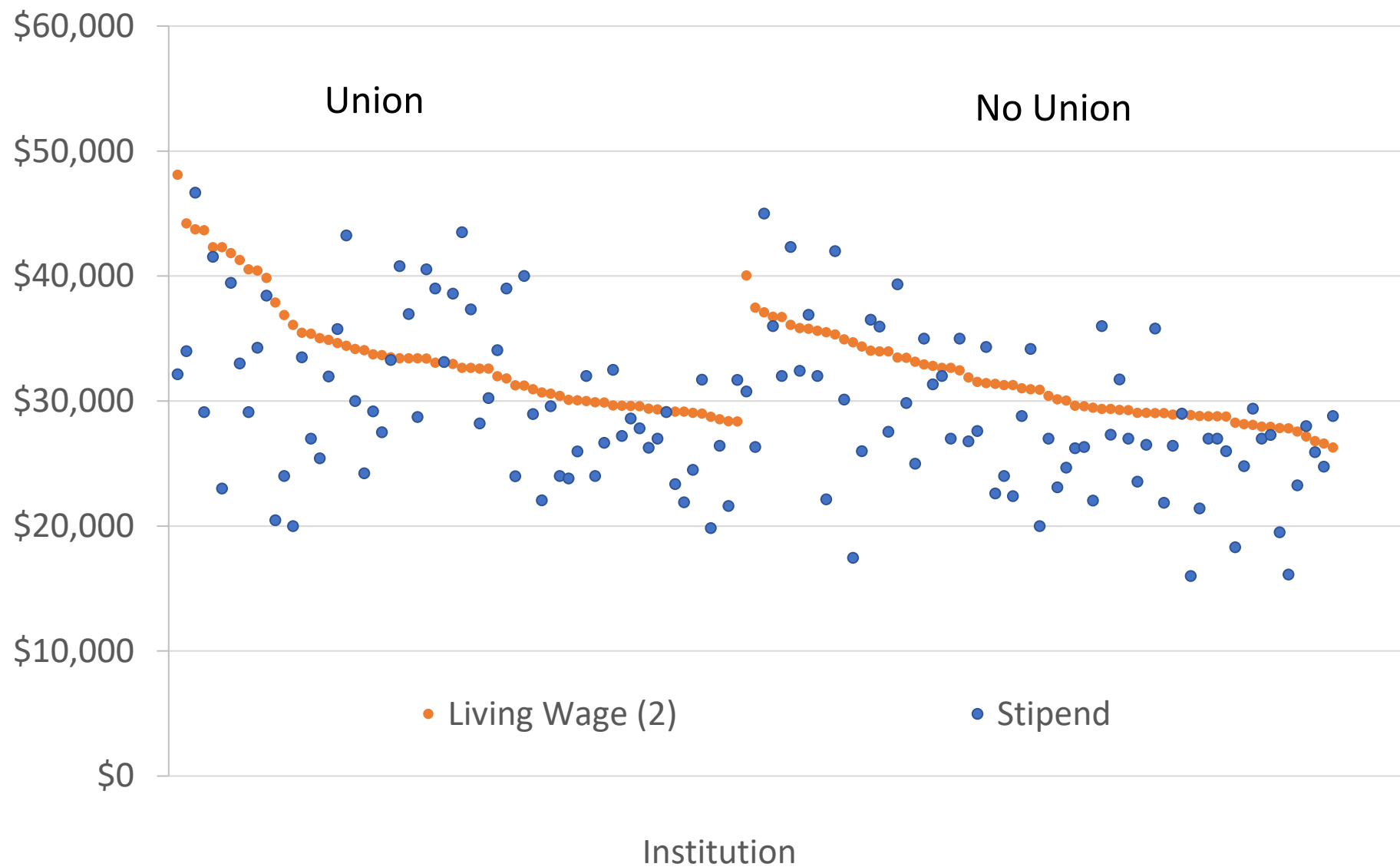
Average Stipend	TA	RA
with union	\$ 30,600	\$ 34,200
without union	\$ 28,200	\$ 31,300

- Institutions with student unions have 9% higher TA and RA stipends than non-union institutions
- Institutions with student unions are in locations that have 8% higher Living Wage (2) than non-union institutions

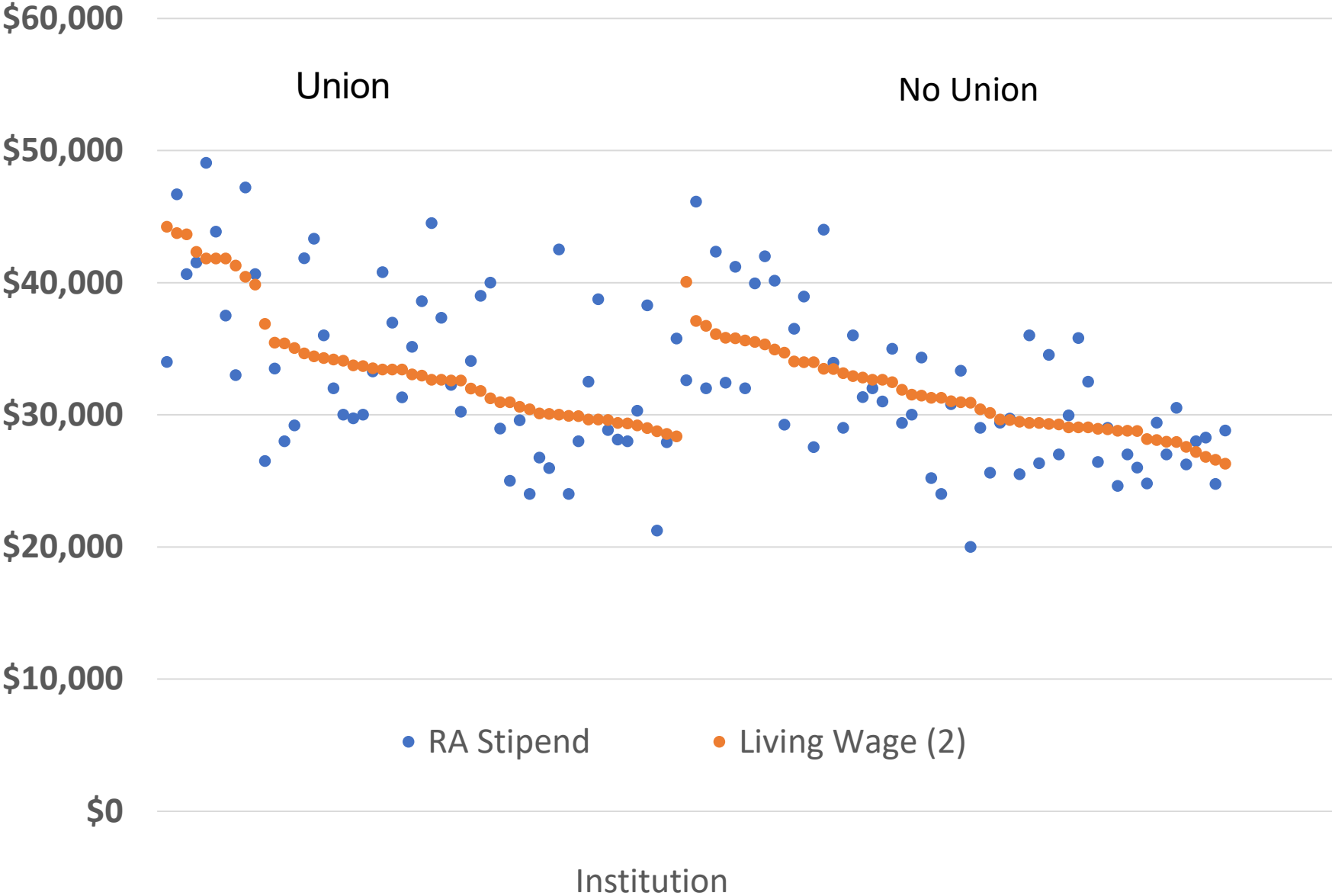
TA Stipend With and Without Union



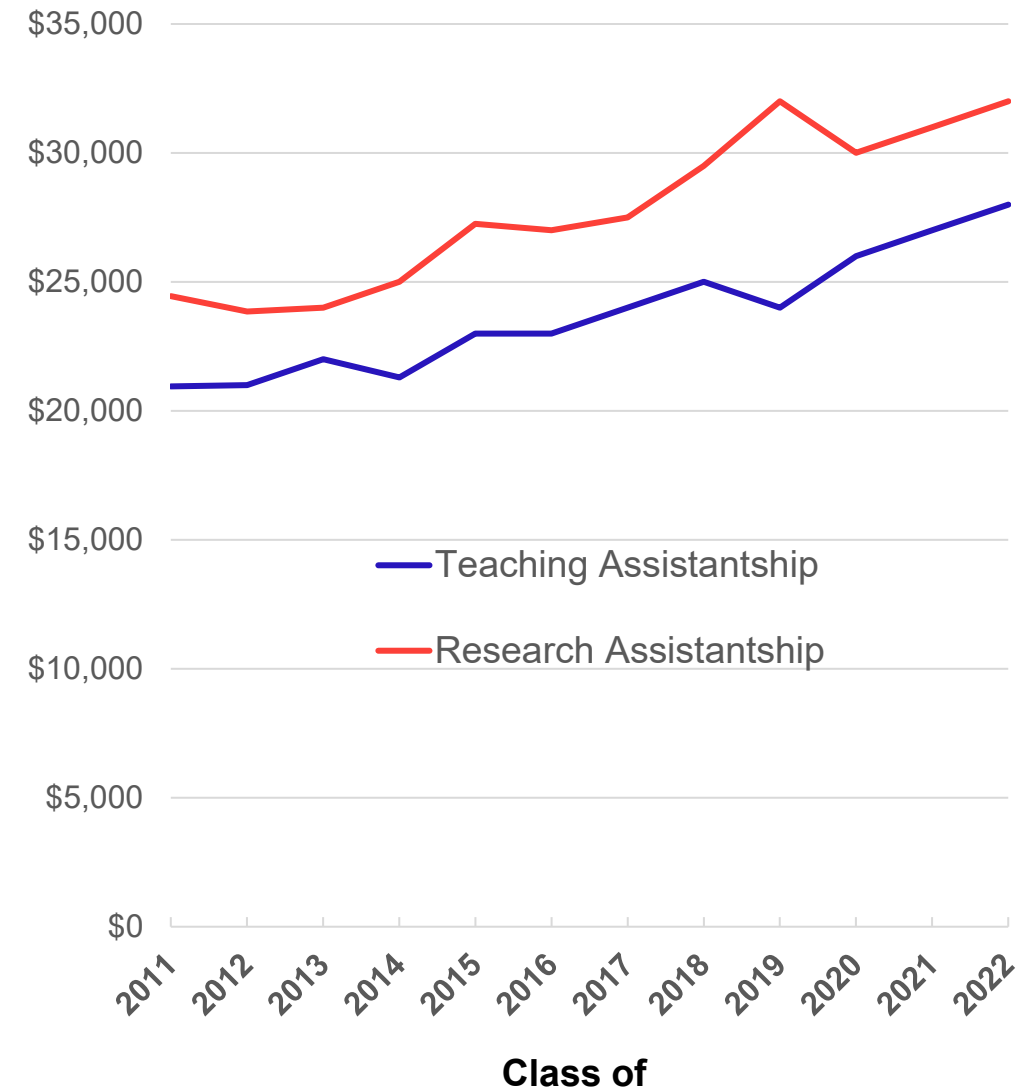
TA Stipend With and Without Union



RA Stipend With and Without Union



Median Stipends for First-Year Physics Graduate Students

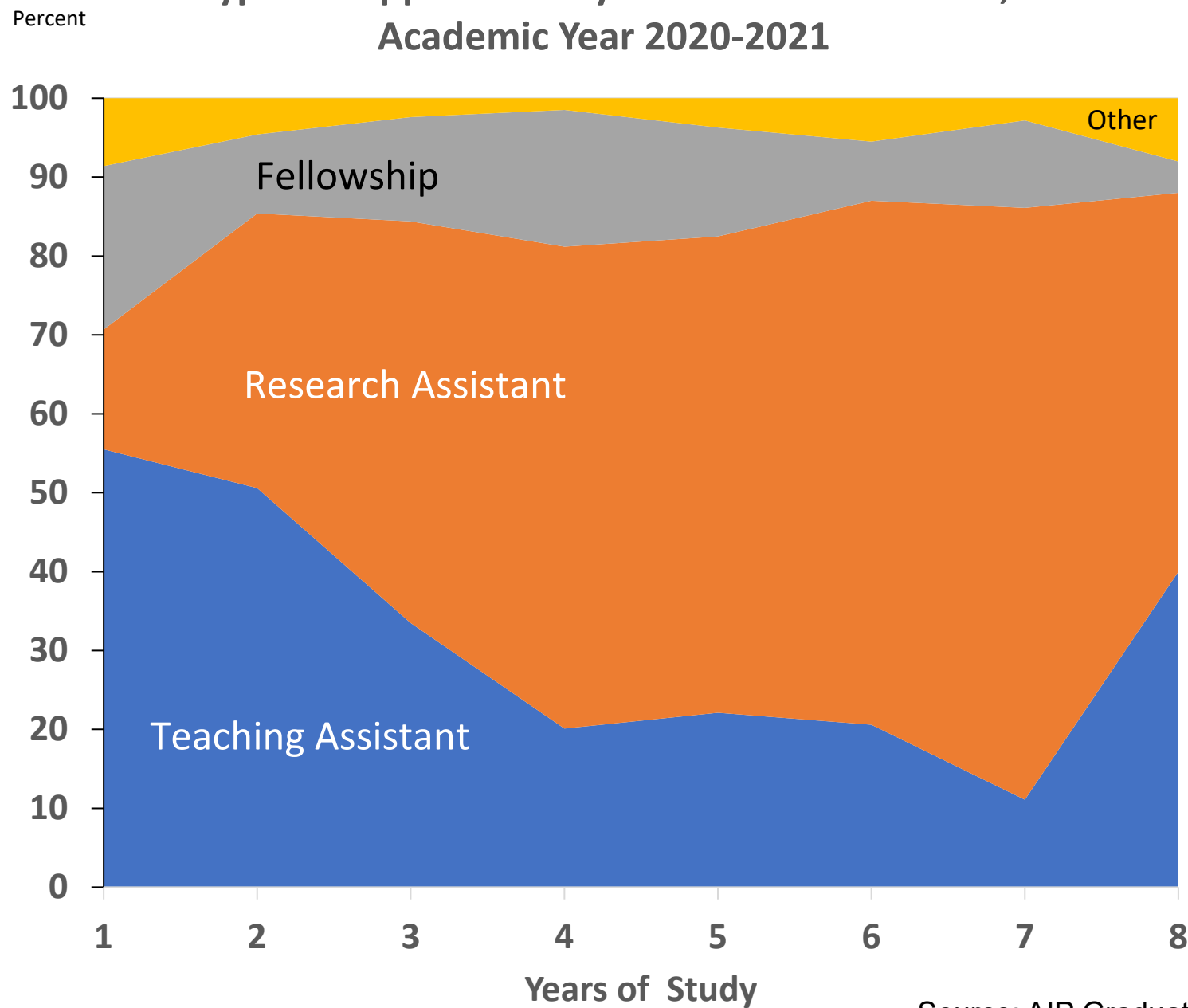


Source: AIP Follow-up Survey of New Physics Bachelors.

Patrick Mulvey
AIP Statistical Research
www.aip.org/statistics

pmulvey@aip.org

Type of Support for Physics Doctoral Students, Academic Year 2020-2021



Source: AIP Graduate Student Survey

Living Wage (2) vs. Minimum Wage

