

Understanding Faculty Compensation

For Graduate Students and Early Career Scholars

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Annual Meeting 2019
Tampa, Florida

Agenda

All resources are online: <https://github.com/jroy042/asee2019sal>

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- Different Kinds of Faculty
 - Tenure versus Non-Tenure Track
 - Non-ladder Faculty
- Different Types of Higher Ed Institutions
- Contract Length
- Compensation
 - Sources of Information
 - Average Salary by Institution Type
 - Differences between Disciplines
- Benefits
- Cost of Living
- Take Home Pay

Caveats

- Focus of today on information not **negotiation strategies**
 - **You should negotiate an offer (even for lecturer, teaching assistant professor and instructor positions)**
 - I strongly encourage graduate students/post-docs on the job market to have at least two mentors with whom you can discuss offers with
 - They can help you understand specific field and institutional requirements to be successful
 - There also consultants who can help with this process

Terms

- Assistant Professor
 - Could be **tenure** or **non-tenure track** (91 % of 4 year institutions have a tenure track)
 - Expectation of service, research and teaching
- Professional Track Faculty
 - **Teaching** Assistant Professor (or Assistant **Teaching** Professor)
 - **Research** Assistant Professor (or Assistant **Research** Professor)
 - **Clinical** Assistant Professor (or Assistant **Clinical** Professor)
 - Assistant Professor **of the Practice** (or **in the Practice**)
- Other Faculty titles
 - Lecturer
 - Instructor
 - Scholar in Residence
 - Professor of the Practice (non-ladder)

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1. Non-teaching professional track faculty positions vary greatly.
 2. Some compensation aspects of institutions with 100 % non-tenure track faculty vary greatly.
 3. Lecturer and Instructor titles vary wildly in use (and modifications) across institutions.
 4. Full Professors and Associate Professors are left out for purposes of time and the focus of the talk. Salary Inversion and Compression can affect the compensation of new assistant professors.

Types of Institutions

- Variables that characterize higher education institution's compensation
 - Number of students enrolled
 - Size of endowment
 - Amount of external research funding
 - Location
 - Control (Private versus Public)
 - Carnegie Classification.
 - Many more...

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Control

- A classification of whether an institution is operated by publicly elected or appointed officials (**public control**) or by privately elected or appointed officials and derives its major source of funds from private sources (**private control**).
 - <https://surveys.nces.ed.gov/ipeds/VisGlossaryAll.aspx>
- Private Institutions
 - Fordham University
 - Carleton College
 - Georgetown University
 - Massachusetts Institute of Technology
- Public Institutions
 - University of California, Davis
 - Rutgers University
 - Indiana University

Carnegie Classification

- <http://carnegieclassifications.iu.edu/>
- Updated Every 3 years (last one in late 2018)
- We'll use the 2015 version
- Categorizes institutions based on degree levels offered and how many are awarded plus research indices.
- Doctoral
- Masters
- Baccalaureate
- Associates

Broad Categories 4 year Institutions

- **Doctoral Universities**: Grant more than 20 doctoral degrees per year.
- Categorized by a “Research Index” (combination of programs, graduation rates, research funding)
 - (R1) **Highest** Research Activity
 - (R2) **Higher** Research Activity
 - (R3) **Moderate** Research Activity
- **Master’s Institutions**: Institutions conferring more than 50 Master’s degrees with less than 20 doctoral degrees per year.
- **Baccalaureate Institutions**: 50 % of degrees awarded at Baccalaureate (4-year) level or above.

TENURED

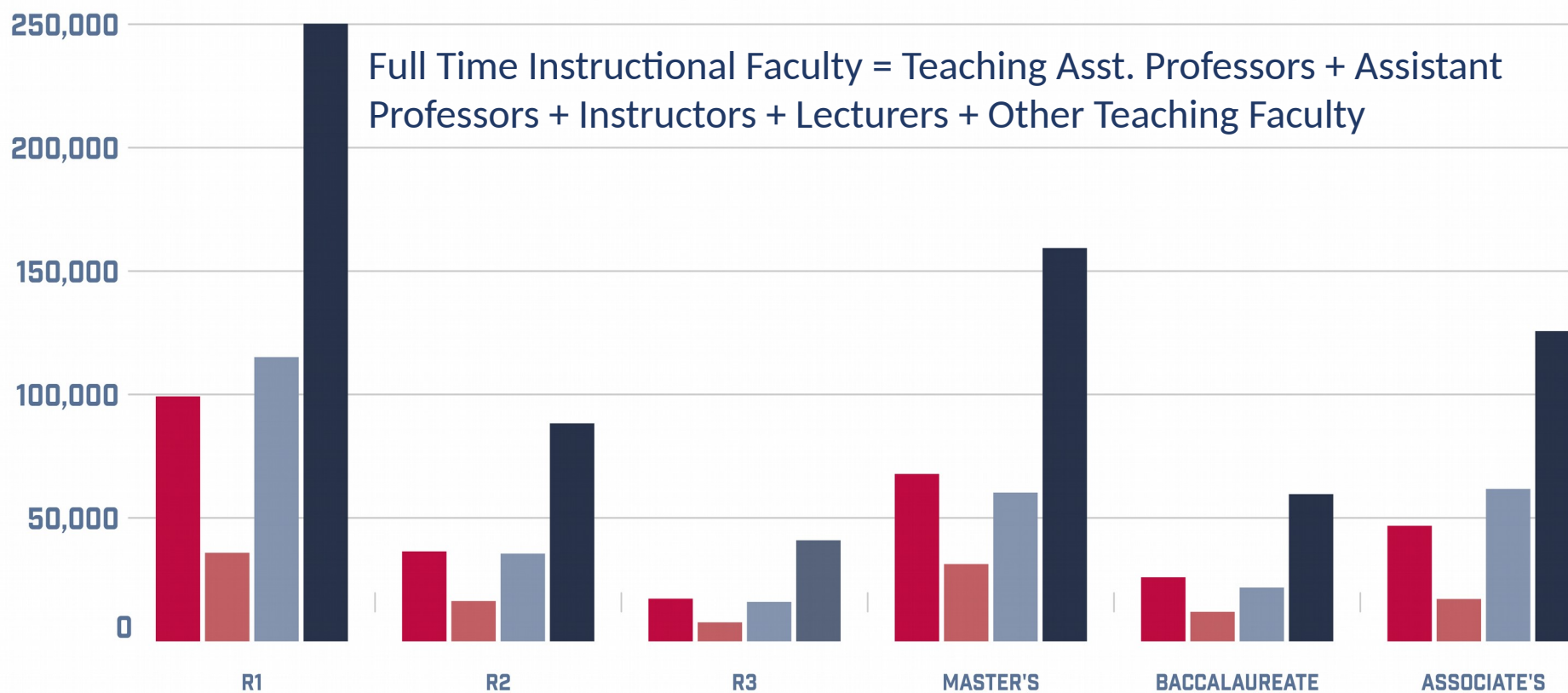
TENURE-TRACK

NON-TENURE-TRACK

TOTAL NUMBER OF
FULL-TIME FACULTY

DISTRIBUTION OF TOTAL FULL-TIME INSTRUCTIONAL FACULTY BY INSTITUTION TYPE, 2016

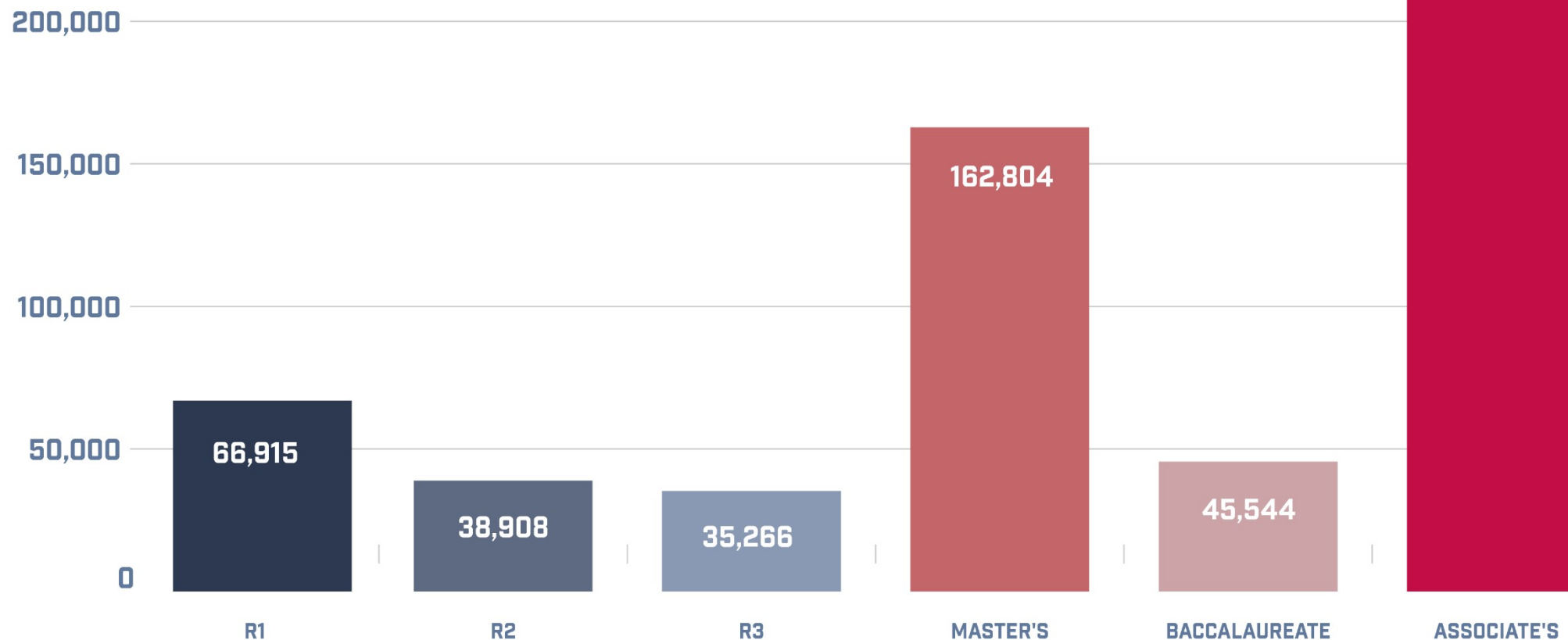
aaup



Compiled by the AAUP Research Office from IPEDS data; accessed July 3, 2018. Excludes tribal colleges and institutions with a special focus. Totals may not equal 100 percent because of rounding.



DISTRIBUTION OF PART-TIME INSTRUCTIONAL FACULTY BY INSTITUTION TYPE, 2016



Compiled by the AAUP Research Office from IPEDS data; accessed July 3, 2018. Excludes tribal colleges and institutions with a special focus.
Totals may not equal 100 percent because of rounding.

Tenure-track versus Non-Tenure Track

- Tenure-track track implies a system of 4,5,6 year probationary period followed by a period of *tenure*.
- Non-Tenure Track Faculty
 - A school without a tenure system
 - An institution with tenure, but modified title (teaching, clinical, research) assistant professor
 - Contract length
 - At-will [Federal: Indefinite]
 - Continuing [Federal: Indefinite, UC System: Security of Employment, “Tenure-like”]
 - Less-than-annual
 - Annual
 - Multi-year

Tenure System in Place

<u>Public</u>	R1	R2	R3	Master's	Baccalaureate
Tenure	81	74	36	253	68
No Tenure System	0	0	0	0	3
<u>Private</u>	R1	R2	R3	Master's	Baccalaureate
Tenure System	34	28	40	225	182
No Tenure System	0	1	8	60	28

Faculty Hiring Trends for 4 year Institutions US Assistant Professors from 2017 IPEDS

Faculty Type	Total	% of Full Time Faculty
FT NTT Indefinite Contract (or At-will)	5,078	9.79
FT NTT Multi-year Contract	4,414	8.51
FT NTT Annual Contract	19,549	37.71
FT NTT Less than Annual Contract	2,174	4.19
Total FT NTT Faculty	31,215	60.21
On Tenure Track	18,442	35.57
Tenured	2,187	4.22
Total Tenure Stream Faculty	20,629	39.79

Data Sources for Faculty Salary (All Disciplines)

- Integrated Post-Secondary Education Data System
 - All institutions who receive federal funding are required to report
 - Freely available: <https://nces.ed.gov/ipeds/use-the-data>
 - Uploaded current, cleaned spreadsheet:
- American Association of University Professors Faculty Compensation Survey Most Benefits
 - 1000+ institutions report salary and benefits data to AAUP. Published every spring
 - Can be viewed online: <https://www.aaup.org/our-work/research/FCS>

Compensation

- Salary
- Benefits
- Support
 - Research Support
 - Teaching Support
 - Service Support

Compensation

- Salary 9-month base salary*
- Benefits Medical/Dental, Tuition, Retirement and Other
- Support
 - Research Support
 - Teaching Support
 - Service Support
 - Other



Startup
Package

Regions (Bureau of Economic Analysis)

Southeast AL AR FL GA KY LA MS NC SC TN VA WV

Far West AK CA HI NV OR WA

Southwest AZ NM OK TX

Rocky Mountains CO ID MT UT WY

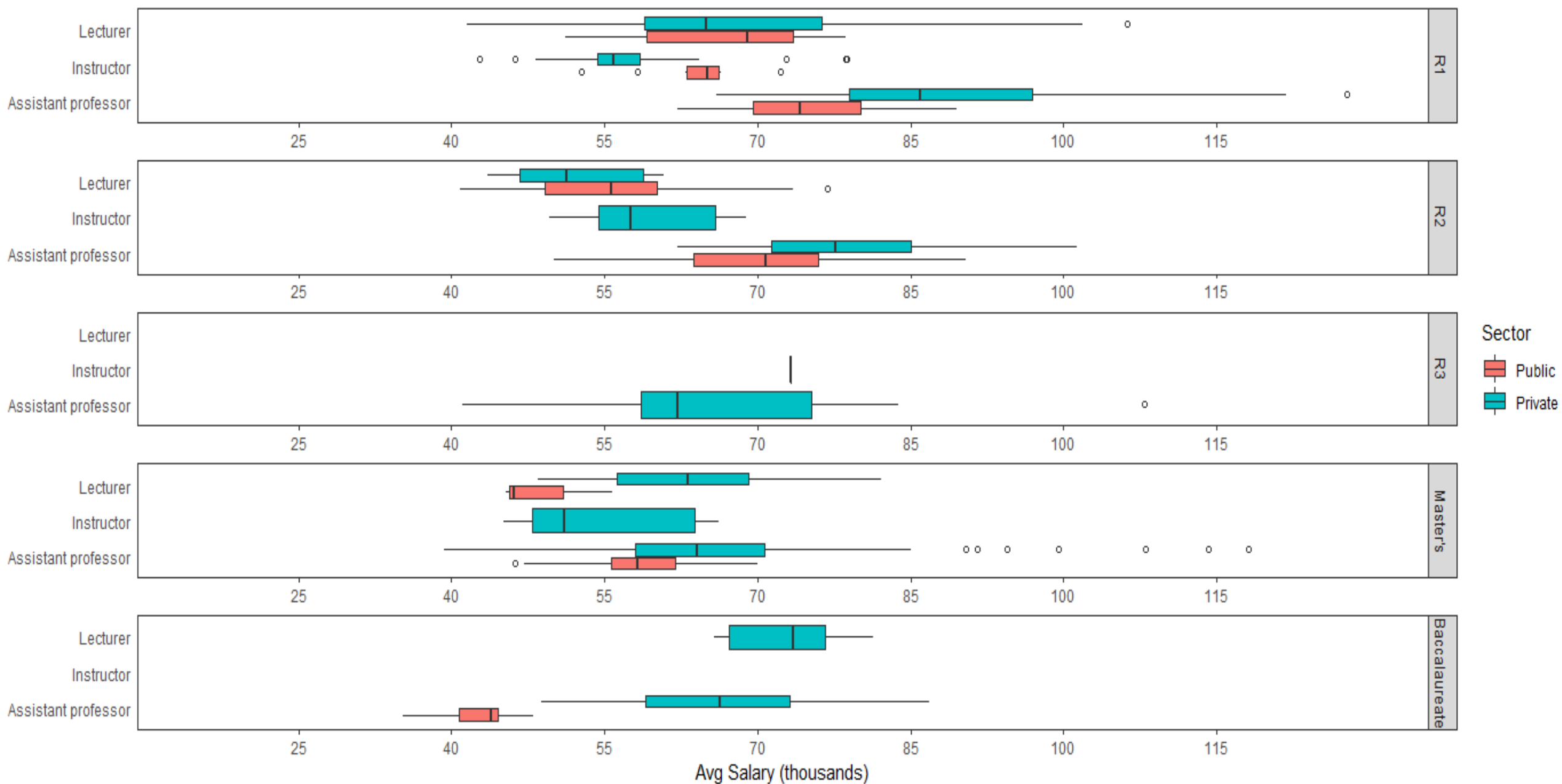
New England CT ME MA NH RI VT

Mid East DE DC MD NJ NY PA

Great Lakes IL IN MI OH WI

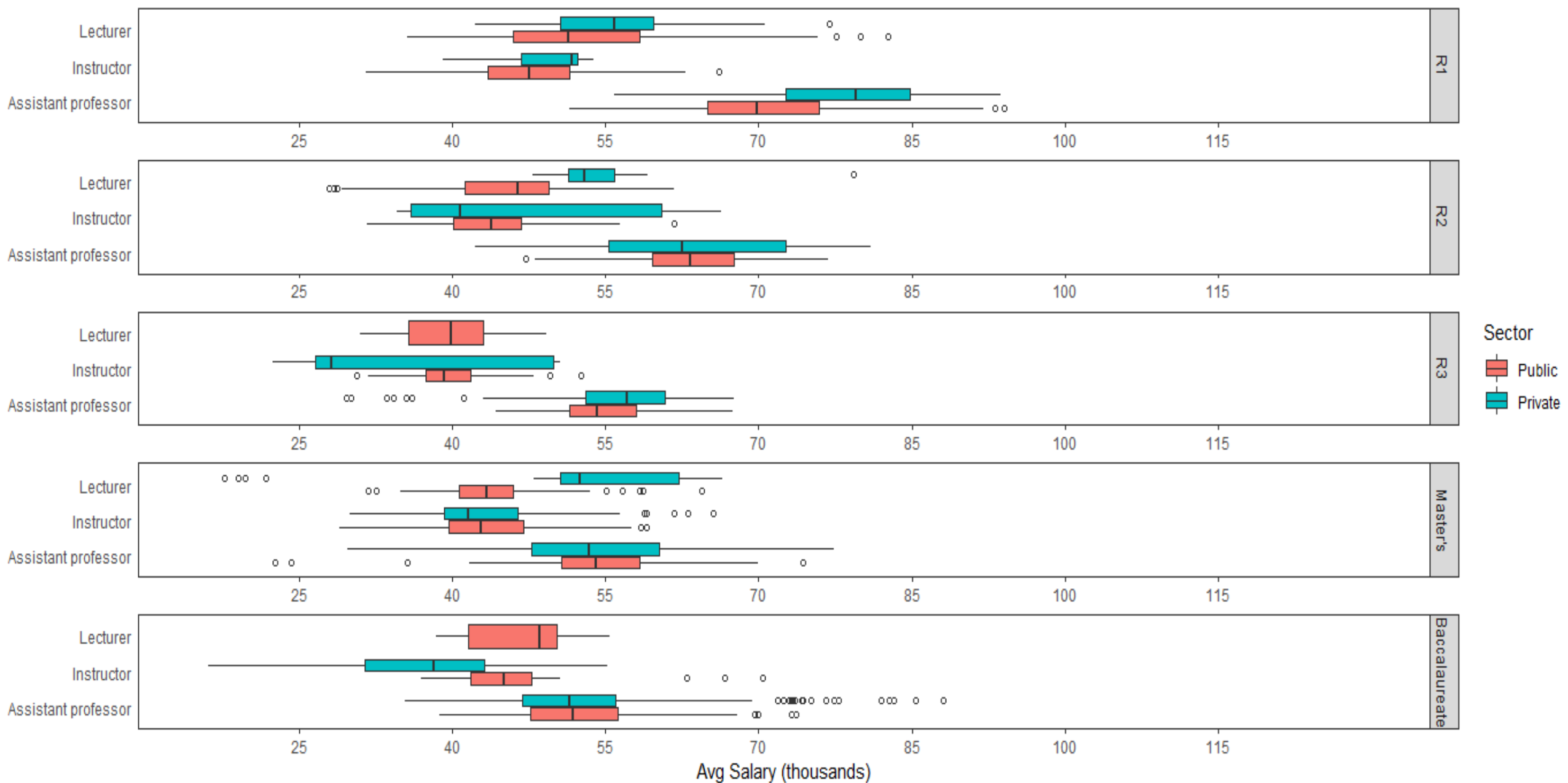
Plains IA KS MN MO NE ND SD

New England



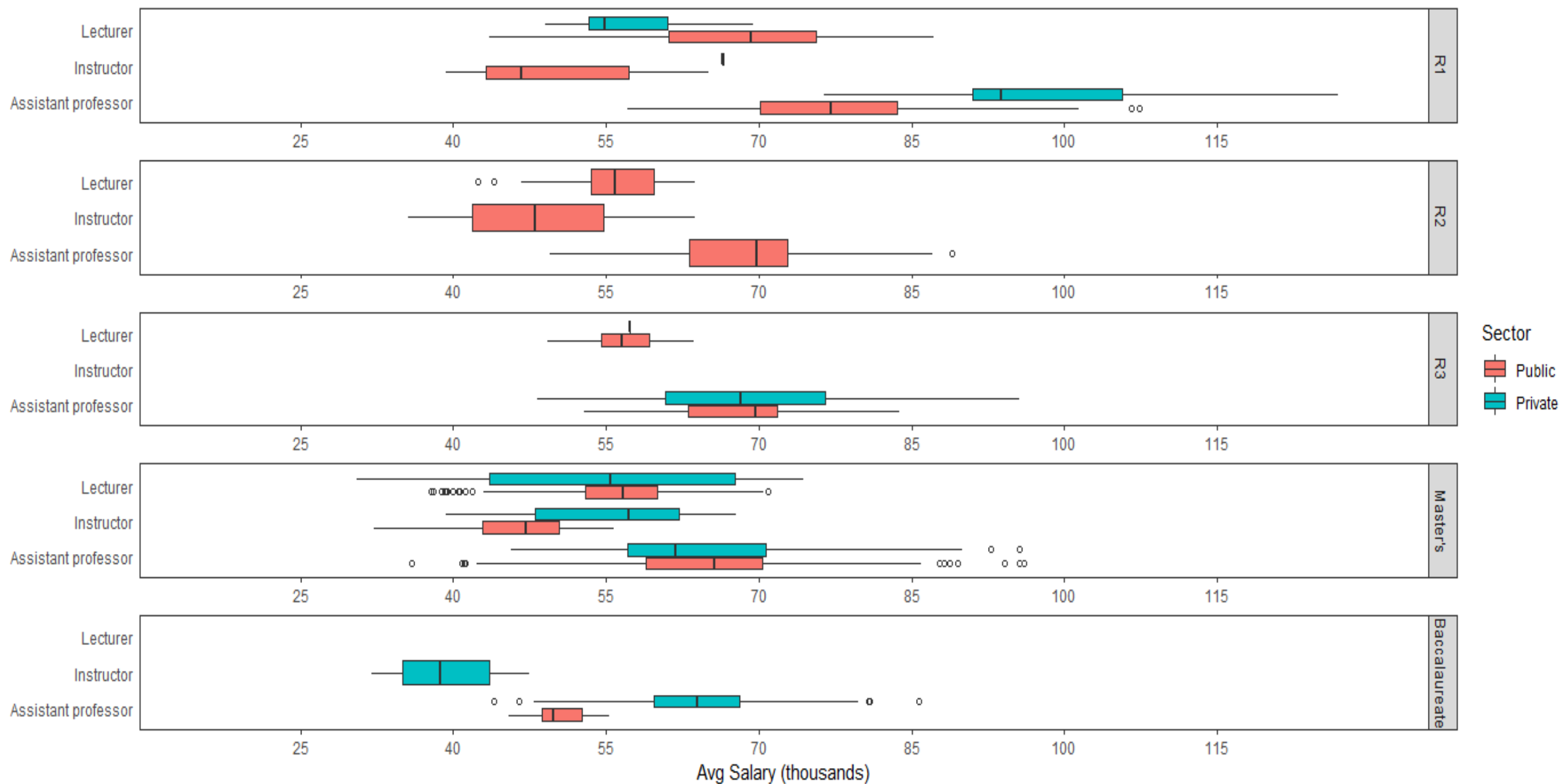
Source: IPEDS, 2017

Southeast



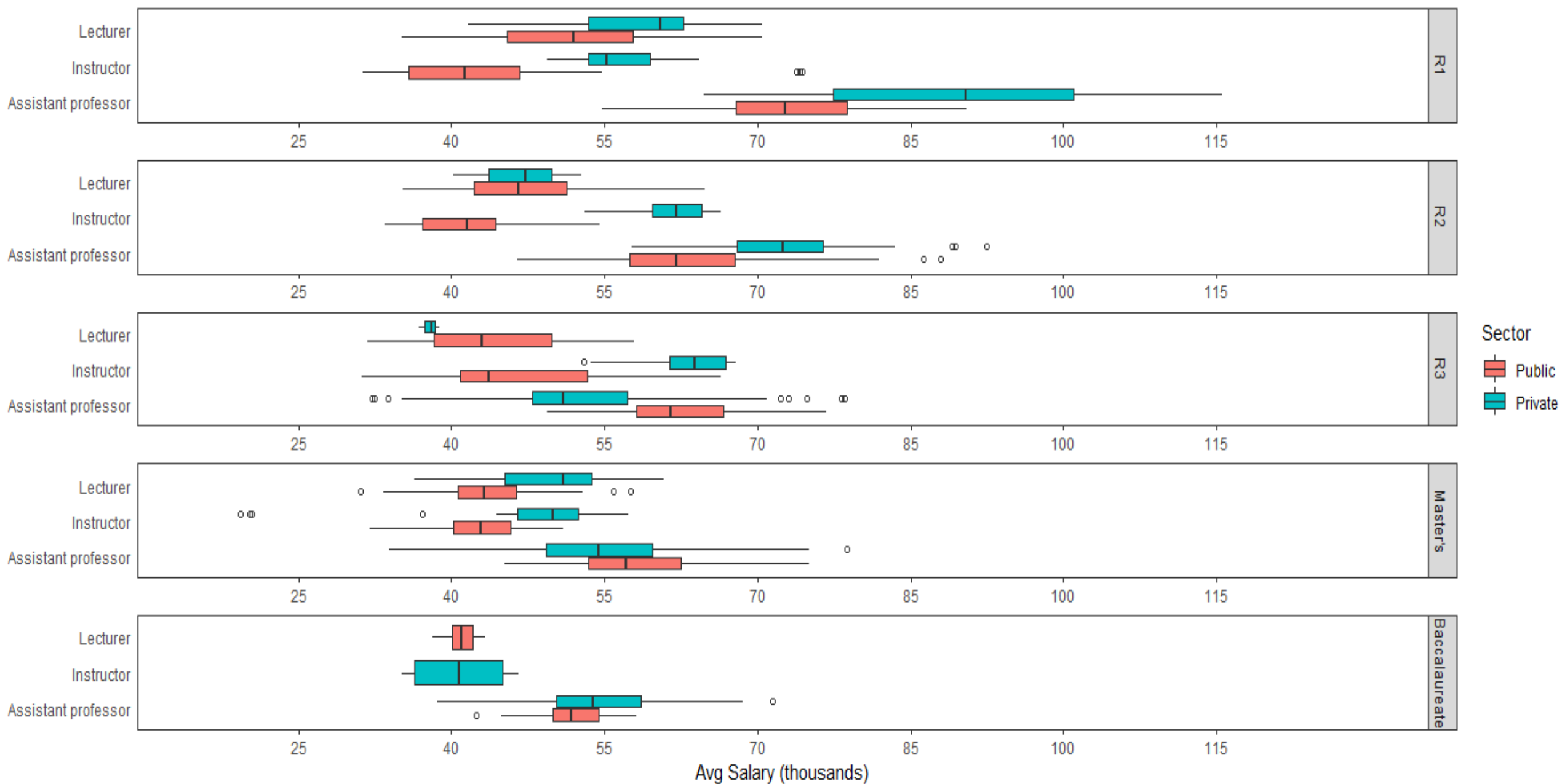
Source: IPEDS, 2017

Far West



Source: IPEDS, 2017

Great Lakes



Source: IPEDS, 2017

Sources of discipline level data

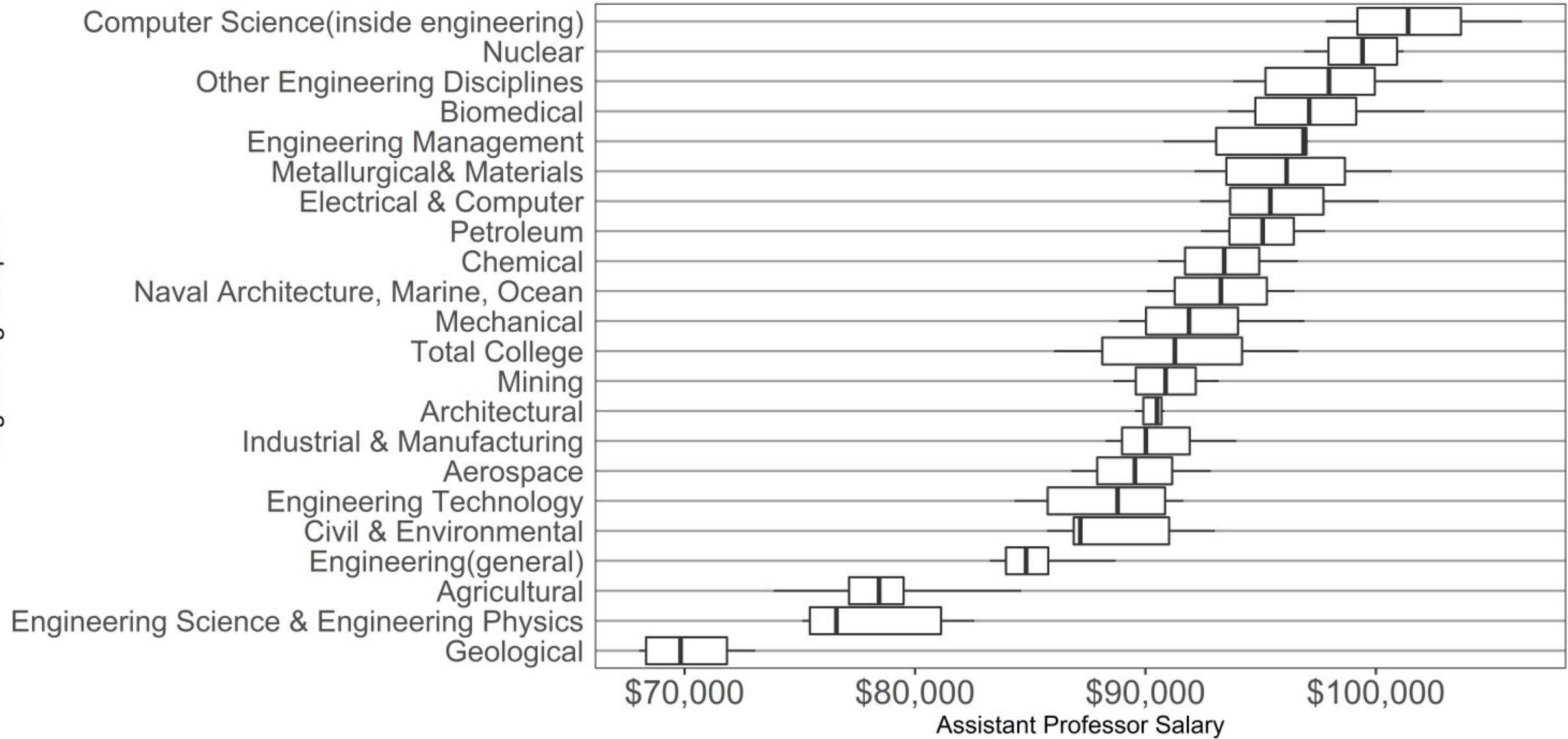
- CUPA-HR
 - Large coverage, many four year private institutions. (Currently, \$420 for summary report)
- OSU Salary Survey
 - Public R1 and R2 institutions (Currently, \$100 for summary data by discipline)
- Disciplines by CIP codes (the federal government's coding scheme for defining subjects).
 - <https://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55>
- For Engineering, American Society for Engineering Education data.
 - By ASEE Discipline

Caveats to discipline level salary sources

- Usually represent **high-mid to high range of salaries**
 - Institutions on lower end of salary range much less likely to participate
- Data not visible by institution (only grouped data is presented)
- Data coverage can be spotty, especially for professional track faculty

2018 ASEE Faculty Salary Survey

Engineering Discipline



Support

- Startup package
 - Not a lot of national data
 - Highly variable
- A good place to start is to understand what you are required to do
 - To get tenure (look at web pages of recently tenured faculty)
 - If you are a professional track faculty member or lecturer/instructor
 - You can ask for support
 - Everything requested should **be rooted in what you need to do your job well.**
 - Travel support?
- Again, rely on mentors for advice

Support continued

- Startup packages for tenure track faculty can range from 10k to over a 1 million dollars
 - Larger startup packages are usually associated with setting up a lab where the expectation is that the scholar will generate external revenue.
 - Sometimes initial equipment will be purchased out of this for non-lab folks (e.g. office computer).
- Travel support
 - How many conferences, how much will they cost, etc..
- Professional development
 - What training do you need to stay current in your field
- Course releases
 - Is the teaching load conducive to meeting research expectations?
 - Pre-tenure course release or sabbatical?

Other sources of information

- Many public institutions have salary data online
 - A good point of comparison is recently hired faculty in the same or similar department
- University of California System
 - <https://ucannualwage.ucop.edu/wage/>
- University of Texas System
 - <https://salaries.texastribune.org/>
- A google search for the institution and “salary database” is a potential place to start examining salary (sometimes these are kept in pdf format or something less accessible).

Benefits

- Big 2
 - Retirement (may require an employee contribution)
 - Medical (probably will require an employee contribution based on a choice of plans).
- Others
 - Tuition
 - Meal Plans
 - Long-term Disability/Life Insurance
- Generally can't be negotiated by Early Career Faculty
 - If you are highly compensated, you might be ineligible for a retirement contribution.
 - If your salary is over the Social Security Wage Base (\$132,900 for 2019), sometimes an equivalent match for retirement can be negotiated for the 6.2 % social security employer contribution

Benefits

	Average Retirement Benefit as Percent of Salary
Institution Type	
Private (Non Religiously Affiliated)	7.27
Private (Religiously Affiliated)	8.93
Public	11.7

Source: 2017-18 AAUP Faculty Salary Survey

TABLE E
Distribution of Retirement Plans by Institution Type

Type of Plan	Private (<i>n</i> =26)	Public (<i>n</i> =33)
Defined Benefit	0%	60%
Defined Contribution	96%	9%
Choice	0%	24%
Hybrid	3%	6%

TABLE F
Employee and Employer Contributions by Type of Plan and Institution

Type of Plan	Private		Public	
	Average Employee Contribution	Average Employer Contribution	Average Employee Contribution	Average Employer Contribution
Defined Benefit	—	—	6.91%	8.86%
Defined Contribution	2.19%	7.73%	5.91%	8.27%
Hybrid	0.00%	5.00%	3.50%	9.16%

Source: Roy, J. 2018. AAUP Academe, Retirement Security for Early Career Faculty

TABLE G

**Average Length of Service before Employer
Contributions Are Portable (Years)**

Type of Plan	Private	Public
Defined Benefit	—	6.2
Defined Contribution	1.3	1.6
Hybrid	3.0	4.0

Source: Roy, J. 2018. AAUP Academe, Retirement Security for Early Career Faculty

Medical Benefits

- Highly variable
- Many public institutions are tied to state healthcare plans
- You should ask what the possible plans are and what the expected contribution is.
 - Do you have a partner or children you'll have to cover?
 - What amount will you need to pay to have the coverage you want?
 - Does the health care plan cover enough for your needs?

Cost of Living

- The federal government produces two very useful data sets
- Median Rents per City
 - What are the 50th percentile for rents in a given area
- Regional Price Parities (RPP)
 - What are the estimated cost of living weights for a given area.
 - Interpretation – purchase power. An RPP of 110 for an area means that what 1\$ can purchase on average nationally requires \$1.10 in that city.
 - An RPP of 85 means that what \$1 can purchase nationally on average requires \$0.85 in that city.

New York City versus Tulsa Oklahoma

- Two Teaching Assistant Professor Positions
- Offer of \$60,000 in New York City, NY versus an offer of \$48,000 in Tulsa, OK.
- Purchase power gives the same scale (approximately)
 - RPP for New York City is 122
 - RPP for Tulsa is 90.7
- **Purchase Power = Salary/ (RPP/100)**
 - NY: \$60,000/(RPP/100) = \$49,180
 - Tulsa: \$48,000/(RPP/100) = \$52,921
- Median Rent for 2 bedroom Apartment
 - New York: \$1,997
 - Tulsa: \$922

How much am I taking home ?

- <https://smartasset.com/taxes/paycheck-calculator>
- Assume 5% required retirement contribution and 100 per month medical contribution
- New York: \$3,368
- Ok: \$2,915

Thank you!

<https://github.com/jroy042/asee2019sal>
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