

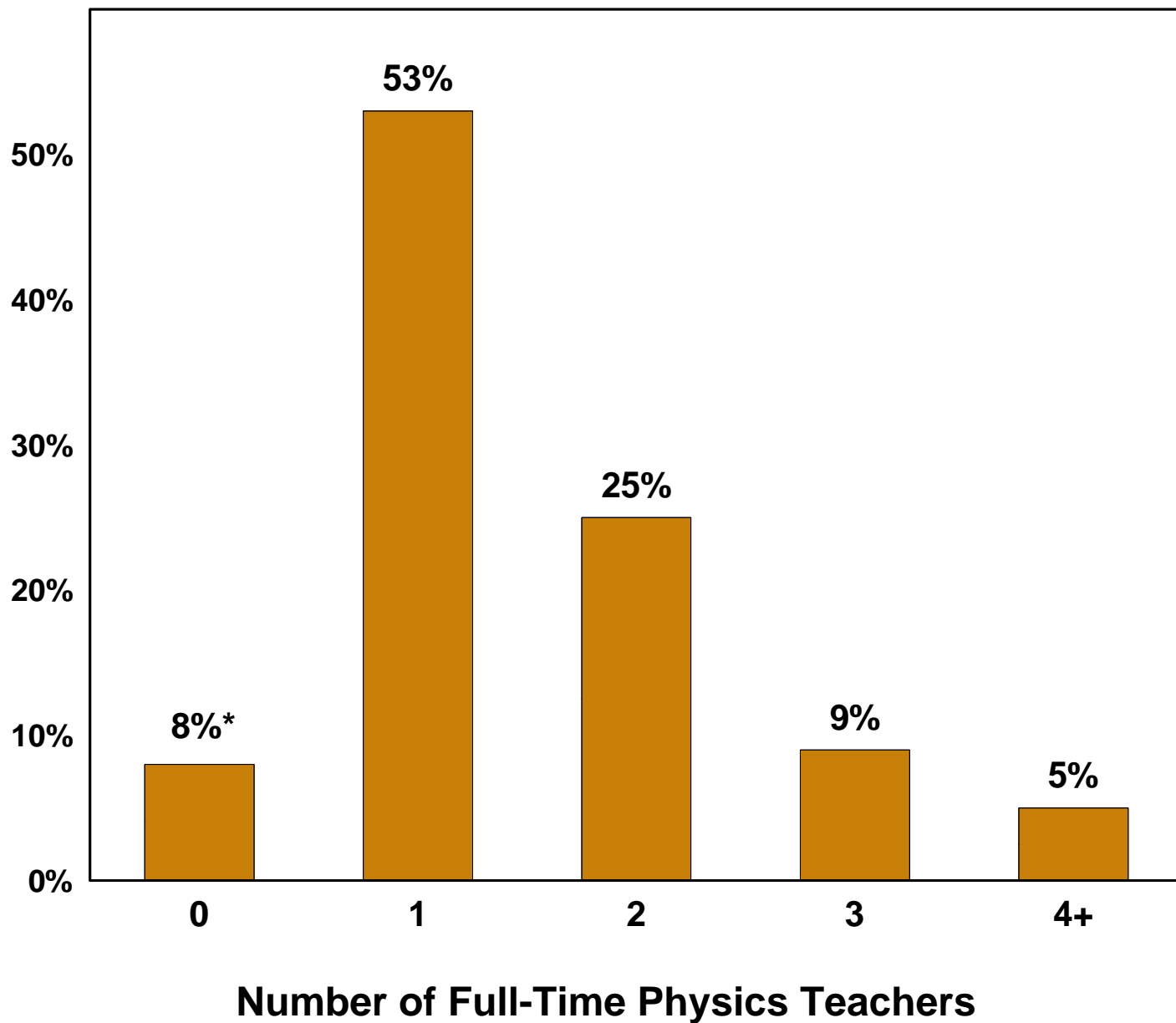
# Physics in the Two-Year Colleges: 2001-02

## Highlights

- During the fall of 2001, there were 1,072 campuses offering a total of 5,105 sections of physics. There were 2,560 faculty teaching physics, and 102,000 students taking physics.
- The typical two-year college physics program was small. Forty-three percent of departments offering physics had only one physics faculty member, and five out of six had two or fewer full-time physics teachers (**Figure 1**).
- Similarly, the number of physics sections offered by each department was limited. Nearly half of the campuses offered three or fewer sections in physics (**Figure 2**).
- Physics offerings were primarily geared towards students planning to transfer to four-year schools. The majority of courses offered were algebra/trigonometry and calculus-based physics, equivalent to the introductory courses offered in four-year college and university physics departments (**Table 1**). The largest two-year college programs were twice as likely as smaller departments to offer applied/technical physics and physics for education majors (**Table 2**).
- Over the past two years, 13% of departments had at least one faculty retirement, 7% had at least one faculty member leave prior to retirement, and 2% had seen both. On the other side of the equation, 5% of departments were currently recruiting new faculty, 7% were planning to recruit the following year, and 1% were recruiting in both years (**Figure 3**).
- 64% of faculty held full-time appointments, nearly all in tenured or permanent positions. The remainder were part-time, with nearly all being temporary.
- Full-time faculty had taught at their current campus twice as long (**Figure 4**), and taught about twice as many sections, as part-timers (**Figure 5**). The percentage of all faculty that had a PhD was similar for full-timers (39%) and part-timers (36%). The percentage of women among faculty members was also almost identical for full-timers (15%) and part-timers (13%) (**Table 3**).
- The main difference between men and women faculty was the median number of years they had spent teaching at their current campus (8 for men vs. 5 for women) and the percentage with a PhD (41% of men vs. 26% of women) (**Table 4**).

# Figure 1. Number of Full-Time Physics Teachers in Departments

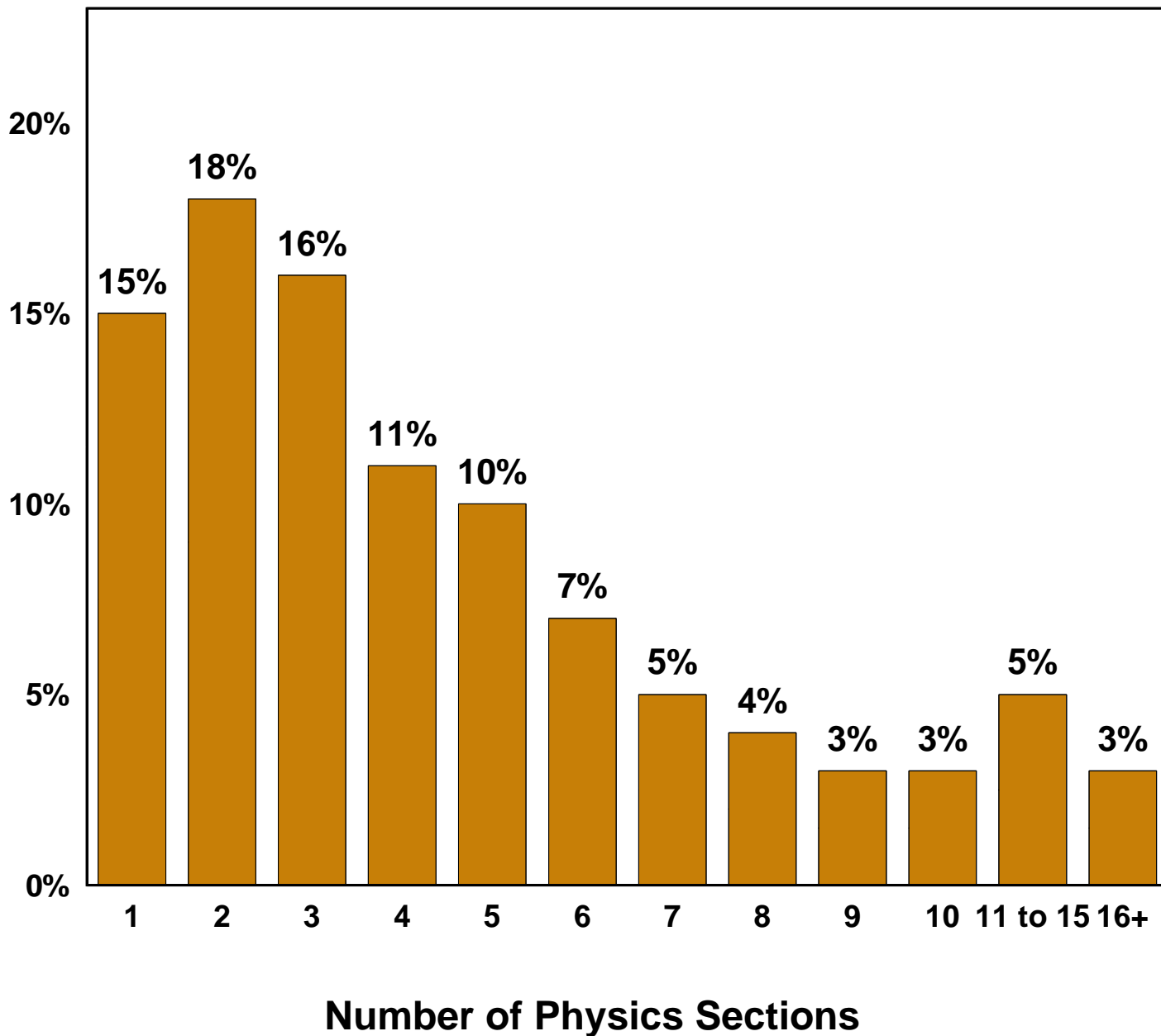
Percent of Departments



\*These departments have only part-time physics faculty.

# Figure 2. Number of Physics Sections Offered by Departments in Fall 2001 Term

Percent of Departments



**Table 1. Types of Physics Courses Offered by Departments**

<b>Course Name</b>	<b>Campuses Offering This Course</b>	<b>% of All Physics Sections Offered</b>
Algebra/Trigonometry	84%	35
Calculus-Based Physics	72	30
Conceptual Physics	30	11
Applied Physics/Technical Physics	21	8
Other Physical Science (at least half physics)	15	7
Physics or Physical Science for Education Majors	13	5
Other Physics	10	3

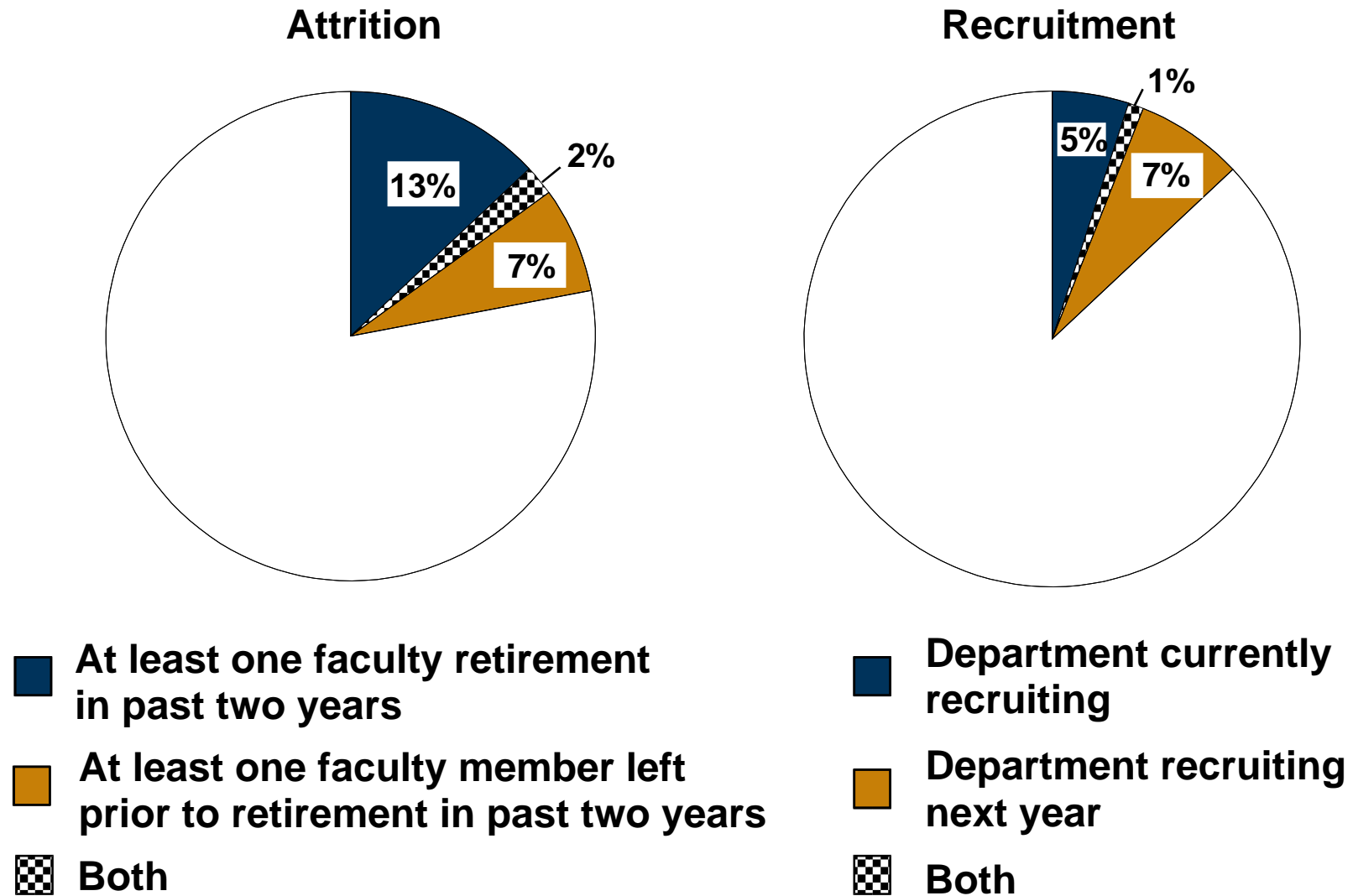
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**Table 2. Types of Physics Courses Offered by Size of Physics Department**

<b>Course Name</b>	<b>Campuses Offering Fewer Than 6 Physics Sections (70%)</b>	<b>Campuses Offering 6 or More Physics Sections (30%)</b>
Algebra/Trigonometry	79%	96%
Calculus-Based Physics	65	90
Conceptual Physics	23	48
Applied Physics/Technical Physics	17	31
Other Physical Science (at least half physics)	11	26
Physics or Physical Science for Education Majors	10	22
Other Physics	7	17

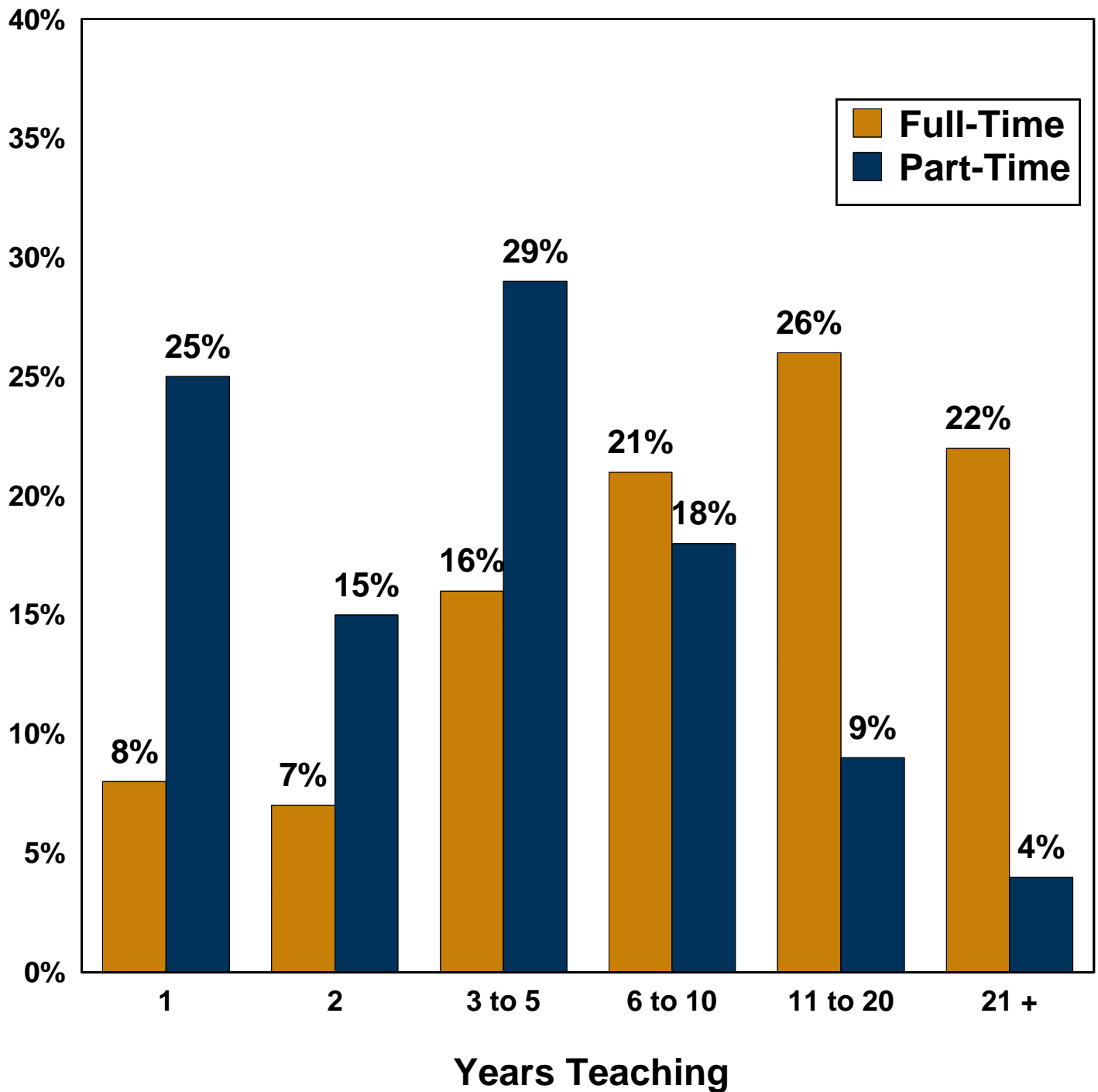
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# Figure 3. Physics Program Recruitment and Retention



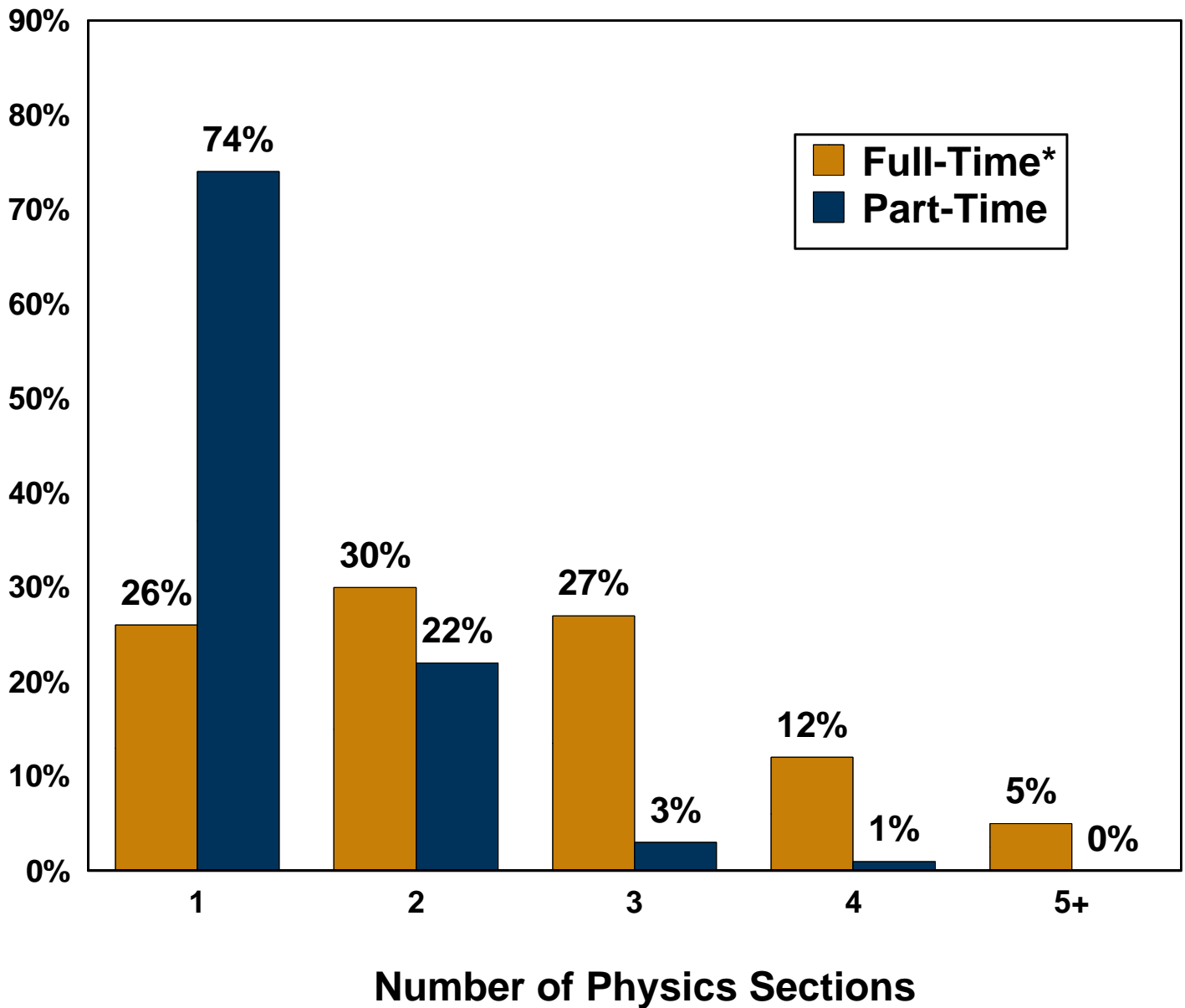
# Figure 4. Number of Years Teaching at Current School

Percent of Faculty



# Figure 5. Number of Physics Sections Taught by Faculty

Percent of Faculty



**\*some full-time faculty also teach courses in other disciplines or have administrative responsibilities**

**Table 3. Characteristics of Full-Time and Part-Time Physics Faculty**

	<b>Full-Time (64%)</b>	<b>Part-Time (36%)</b>
Mean Number of Sections	2.4	1.3
Median Number of Sections	2	1
% with PhD or EdD	39	36
% Tenured/Permanent	79	4
% Tenure-Track	17	1
% Temporary	4	95
Median Years Working at Campus	10	3
Mean Years Working at Campus	12.7	5.9
% Women	15	13

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**Table 4. Characteristics of Women and Men Physics Faculty**

	<b>Women (14%)</b>	<b>Men (86%)</b>
% Full-Time	69	67
Mean Number of Sections	2.2	2.0
Median Number of Sections	2	2
% with PhD or EdD	26	41
% Tenured/Permanent	53	57
% Tenure-Track	16	11
% Temporary	31	32
Median Years Working at Campus	5	8
Mean Years Working at Campus	7.9	11

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