

FISCAL YEAR 2019

# GRADUATE WAGES REPORT



## ABOUT THIS REPORT

The Arizona Board of Regents' Graduates Wages Report is an annual report examining the wages that graduates of the state's public universities earn in the Arizona workforce. This important educational outcome is reported in terms of the overall contribution of graduates to the state's economy, median wages earned by graduates, persistence of graduates in the Arizona workforce as well as the variability in graduate wages and student loan debt across degree levels and instructional programs.

Data in this report utilizes the wages of graduates of Arizona's public universities since 1990. Graduate wage data is provided by the Arizona Department of Economic Security and all reported wages reflect only those graduates who earned wages in Arizona.

Graduates of Arizona's public universities are reported by each university according to the highest degree completed at that specific institution. Reported values for university undergraduate degree recipients include individuals who earned graduate level degrees from other institutions. Moreover, to maintain the privacy of graduates' information, only summary statistics are provided by the universities to the board for this report. As a result, graduates who received degrees from more than one Arizona public university are not deduplicated and are included in each institution's reported values. Totals reported for the Arizona public university enterprise duplicate graduates who received more than one degree from Arizona's public universities.

All median wages reported reflect only those graduates who earned Arizona wages in all four quarters of the calendar year. Median wages, student loan debt at graduation and debt-to-income ratios reported by program level and instructional program reflect five-year cohorts of graduates one to five years after their graduation. Data is redacted and marked "R" wherever there is a subpopulation of five or fewer graduates.

### ABOUT THE ARIZONA BOARD OF REGENTS

The Arizona Board of Regents is committed to ensuring access for qualified residents of Arizona to undergraduate and graduate institutions; promoting the discovery, application and dissemination of new knowledge; extending the benefits of university activities to Arizona's citizens outside the university; and maximizing the benefits derived from the state's investment in education.

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## EXECUTIVE SUMMARY

Graduates of Arizona's public universities are an important part of the Arizona workforce. In 2019, 232,476 undergraduate degree recipients earned \$14.9 billion in Arizona wages and paid an estimated \$1.07 billion in state taxes. Similarly, 85,869 graduate degree recipients earned \$7 billion in Arizona wages and paid an estimated \$497 million in state taxes.

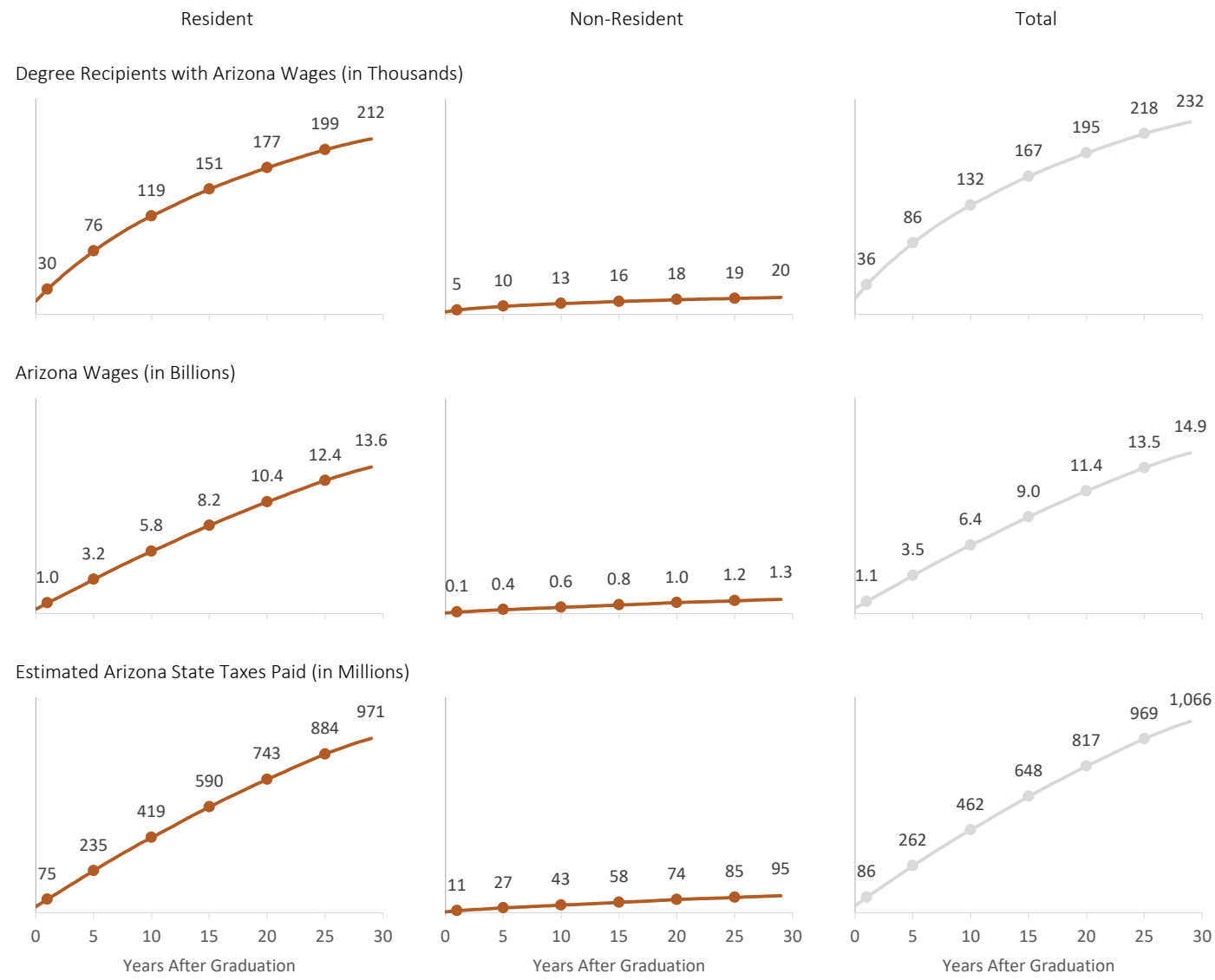
The median wages of graduates of Arizona's public universities increase with the number of years since graduation. Moreover, the median wages of graduates one, five, 10 and 20 years after graduation have all increased since 2010.

Graduates' persistence in the Arizona workforce declines over time. Without comparable data from other states, however, it is unclear if the persistence rates in Arizona are normative or cause for concern.

Graduates' median wages, student loan debt at graduation and debt-to-income ratios vary considerably across instructional programs.

Arizona Public University Enterprise

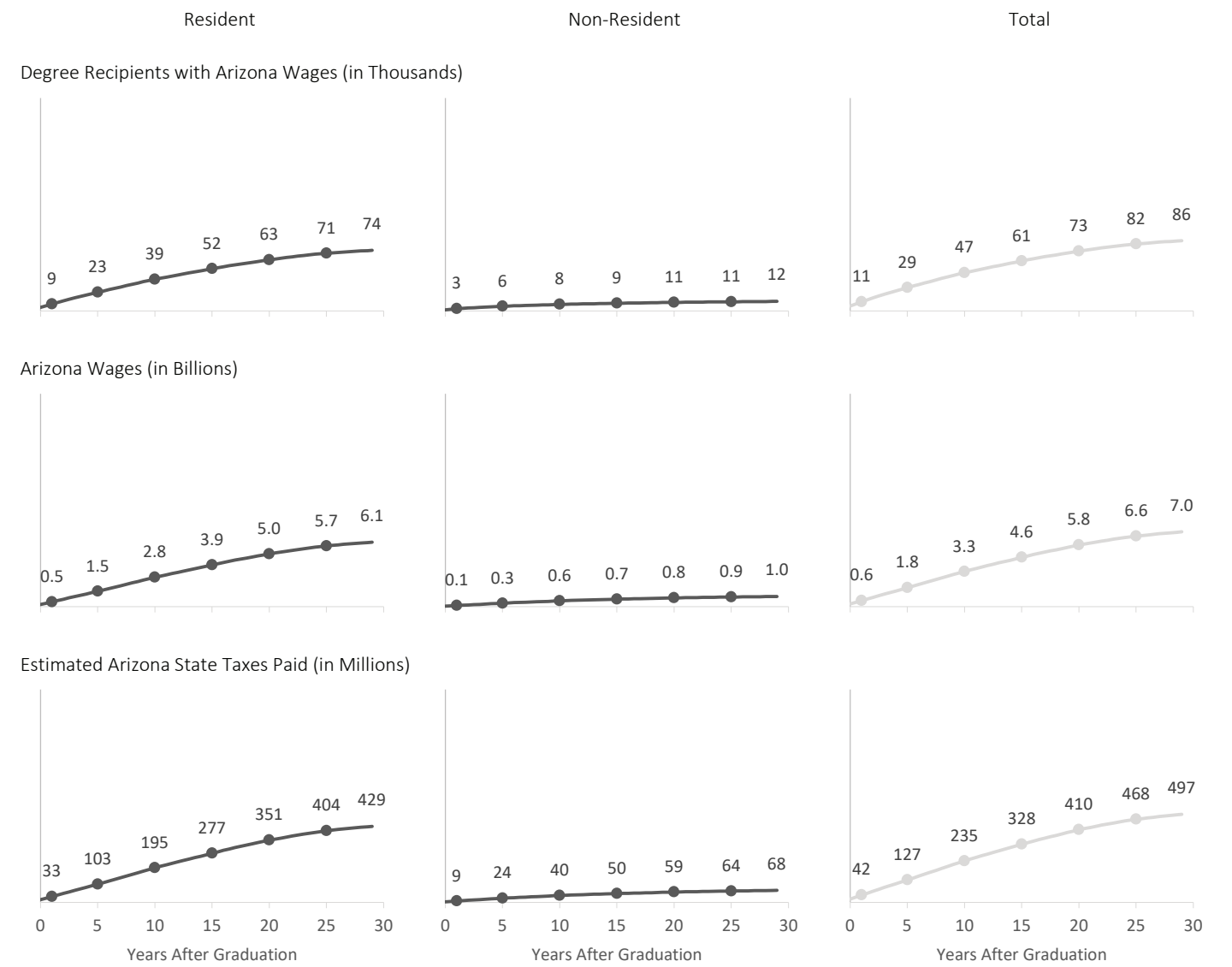
Exhibit E.W.1: Cumulative Bachelor's Degree Recipients, Wages and Estimated State Taxes by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

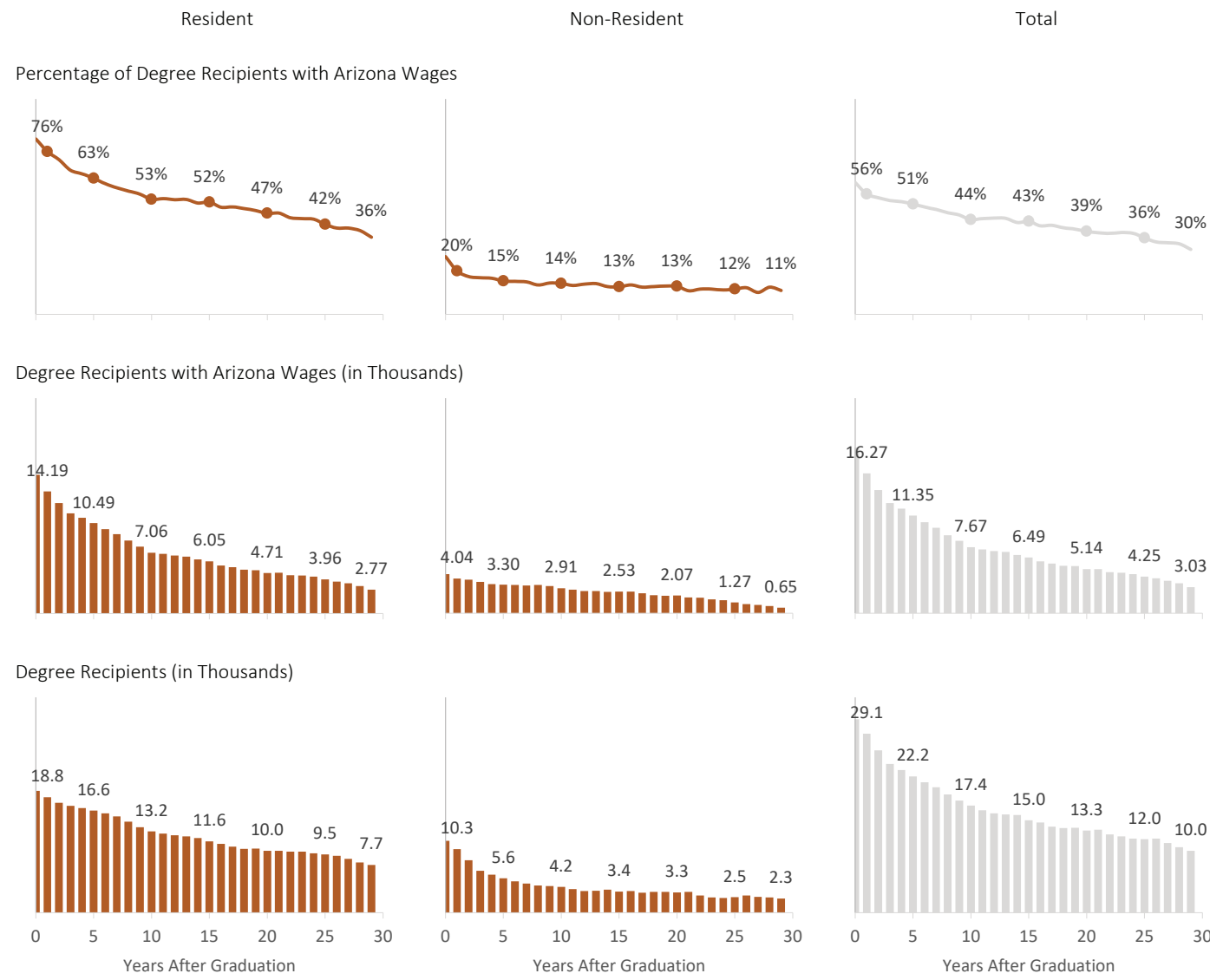
Arizona Public University Enterprise

Exhibit E.W.2: Cumulative Graduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation



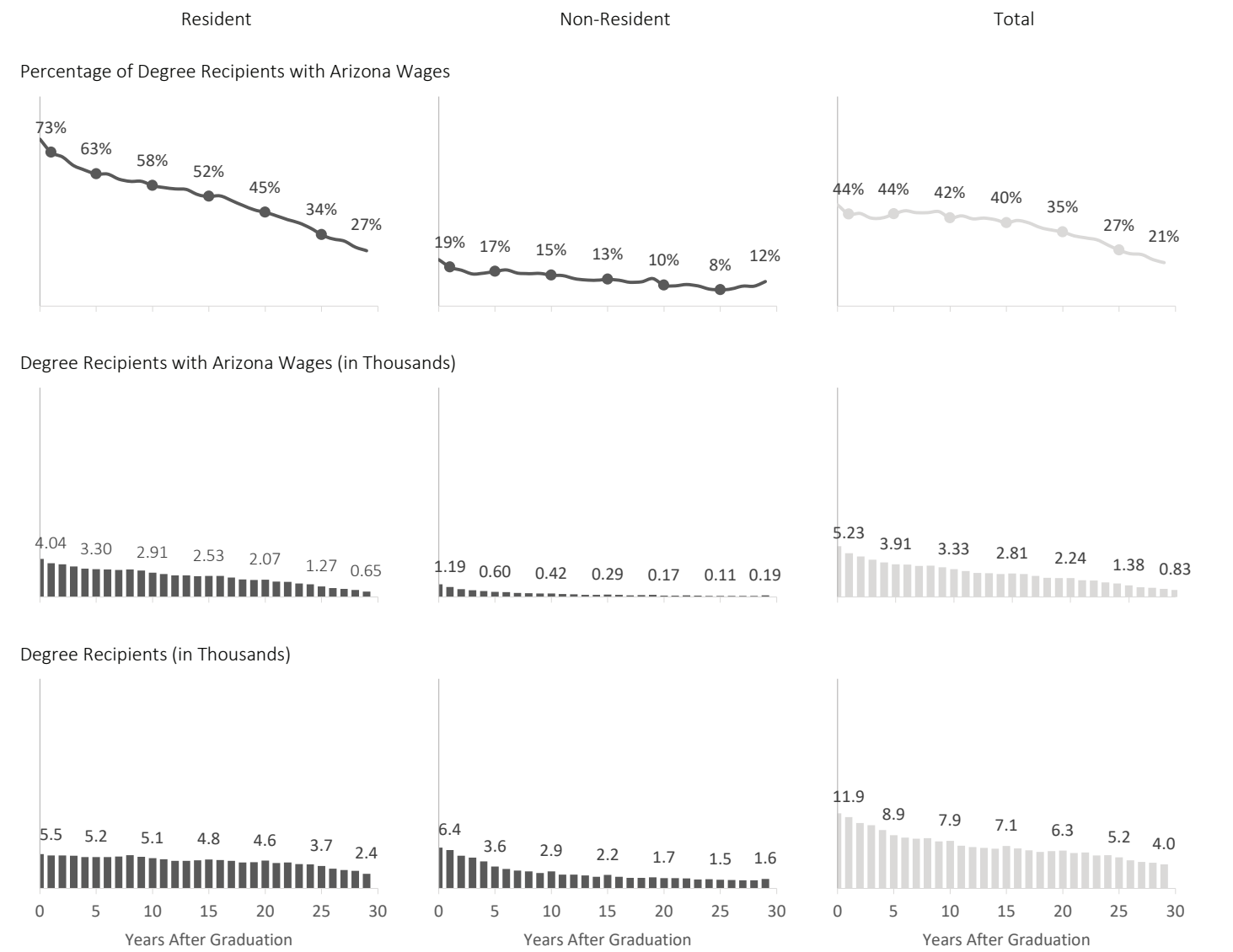
Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit E.W.3: Median Arizona Wages Earned by Bachelor's Degree Recipients by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Exhibit E.W.4: Median Arizona Wages Earned by Graduate Degree Recipients by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Arizona State University

Exhibit ASU.W.1: Cumulative Undergraduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation

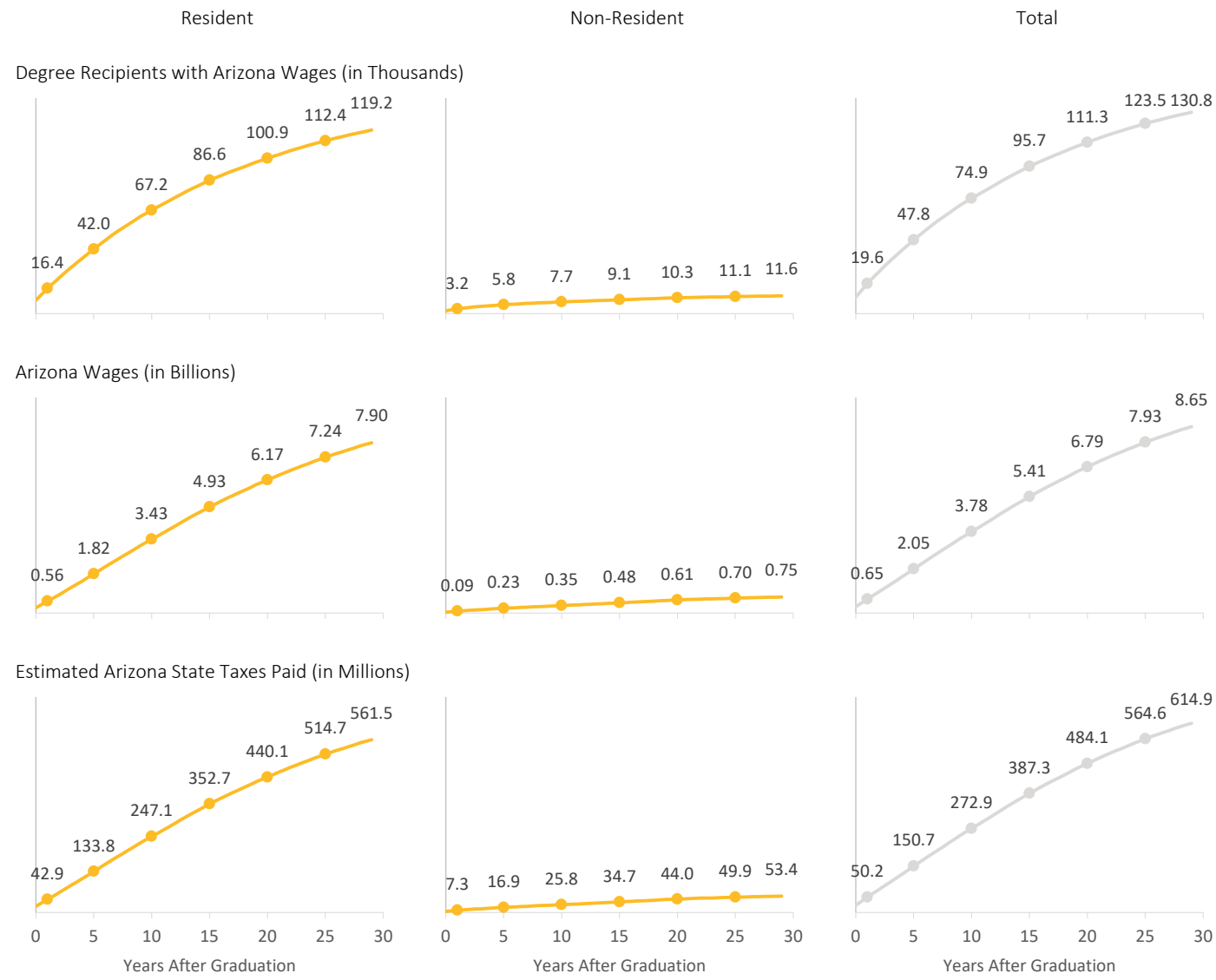
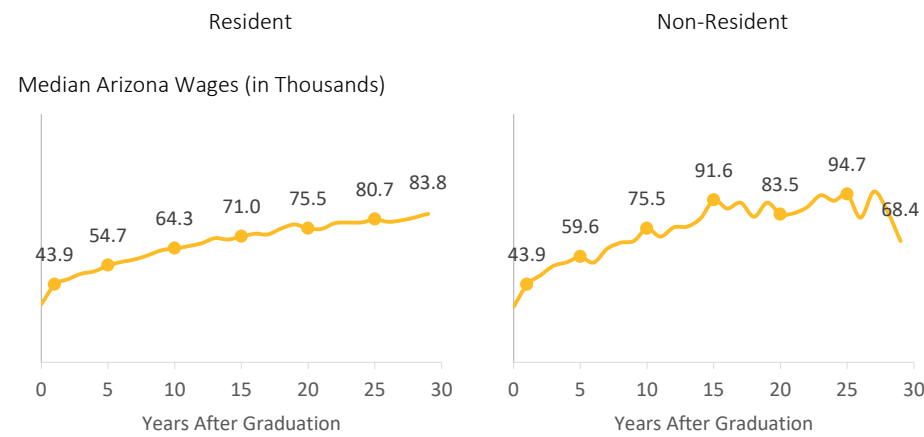


Exhibit ASU.W.2: Median Arizona Wages of Undergraduate Degree Recipients by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Arizona State University

Exhibit ASU.W.3: Cumulative Graduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation

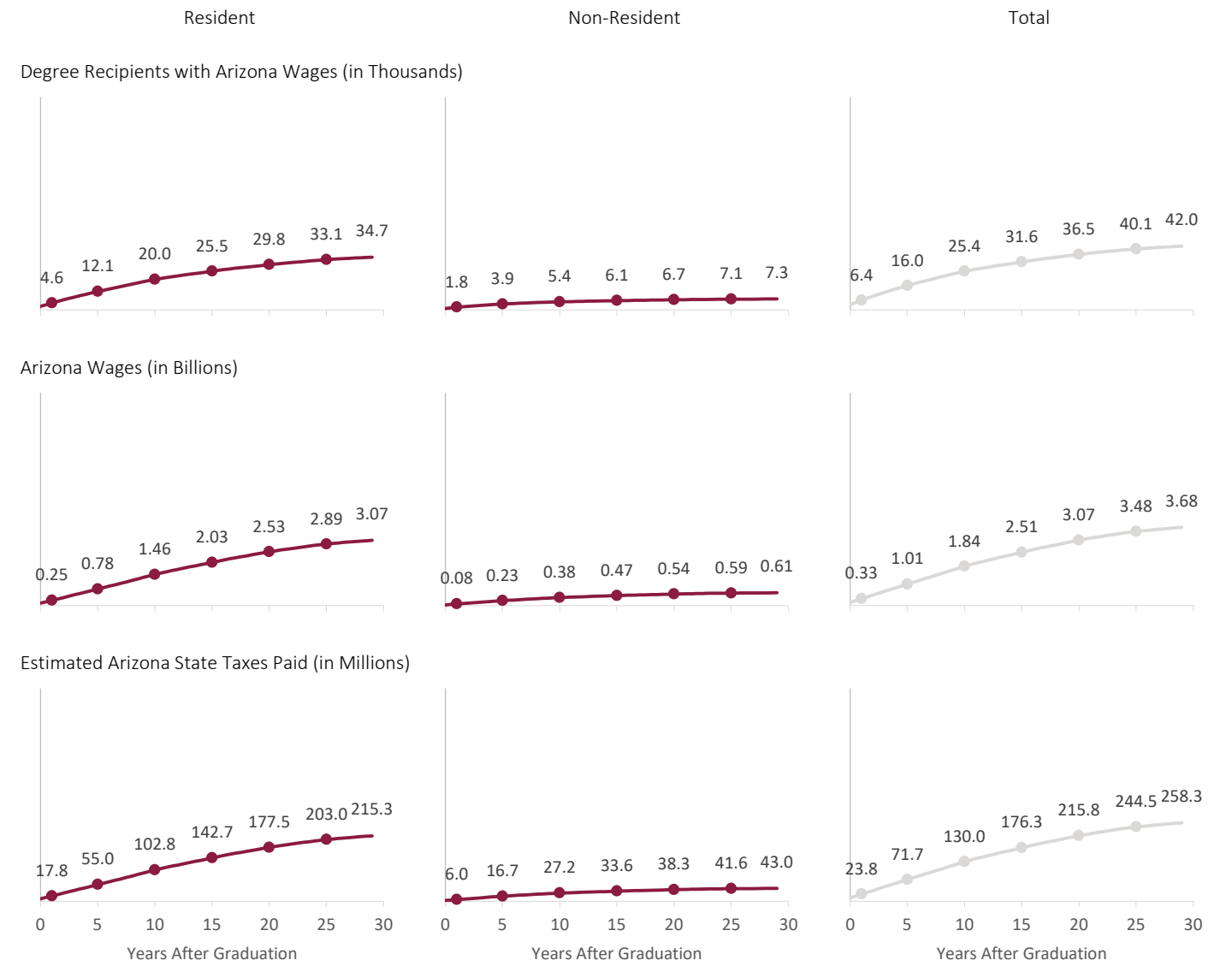
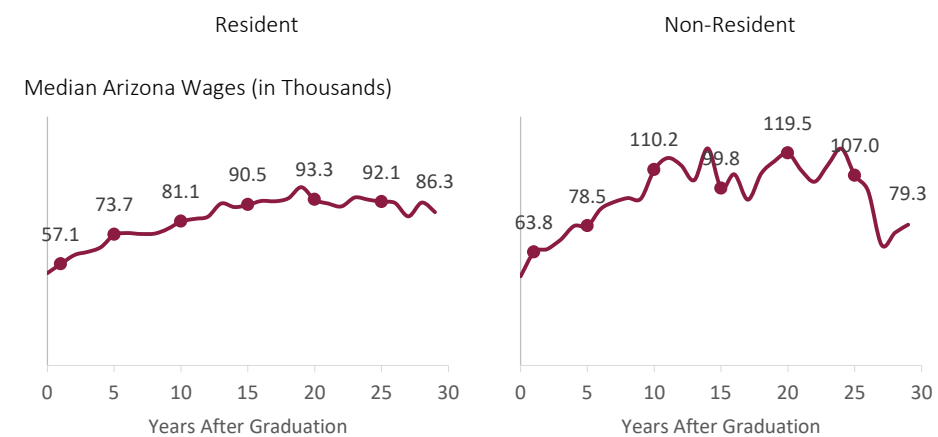
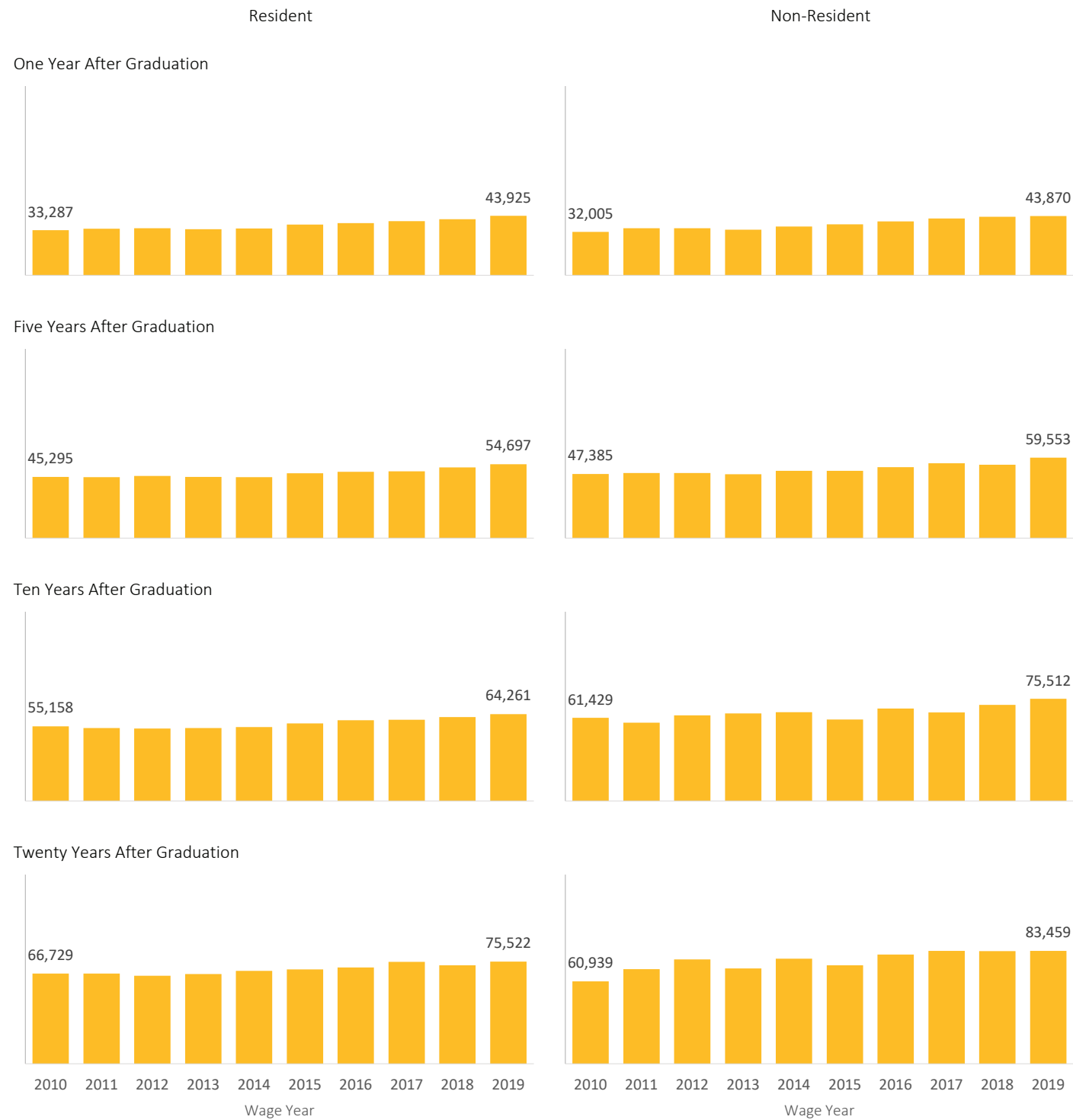


Exhibit ASU.W.4: Median Arizona Wages of Graduate Degree Recipients by Years After Graduation



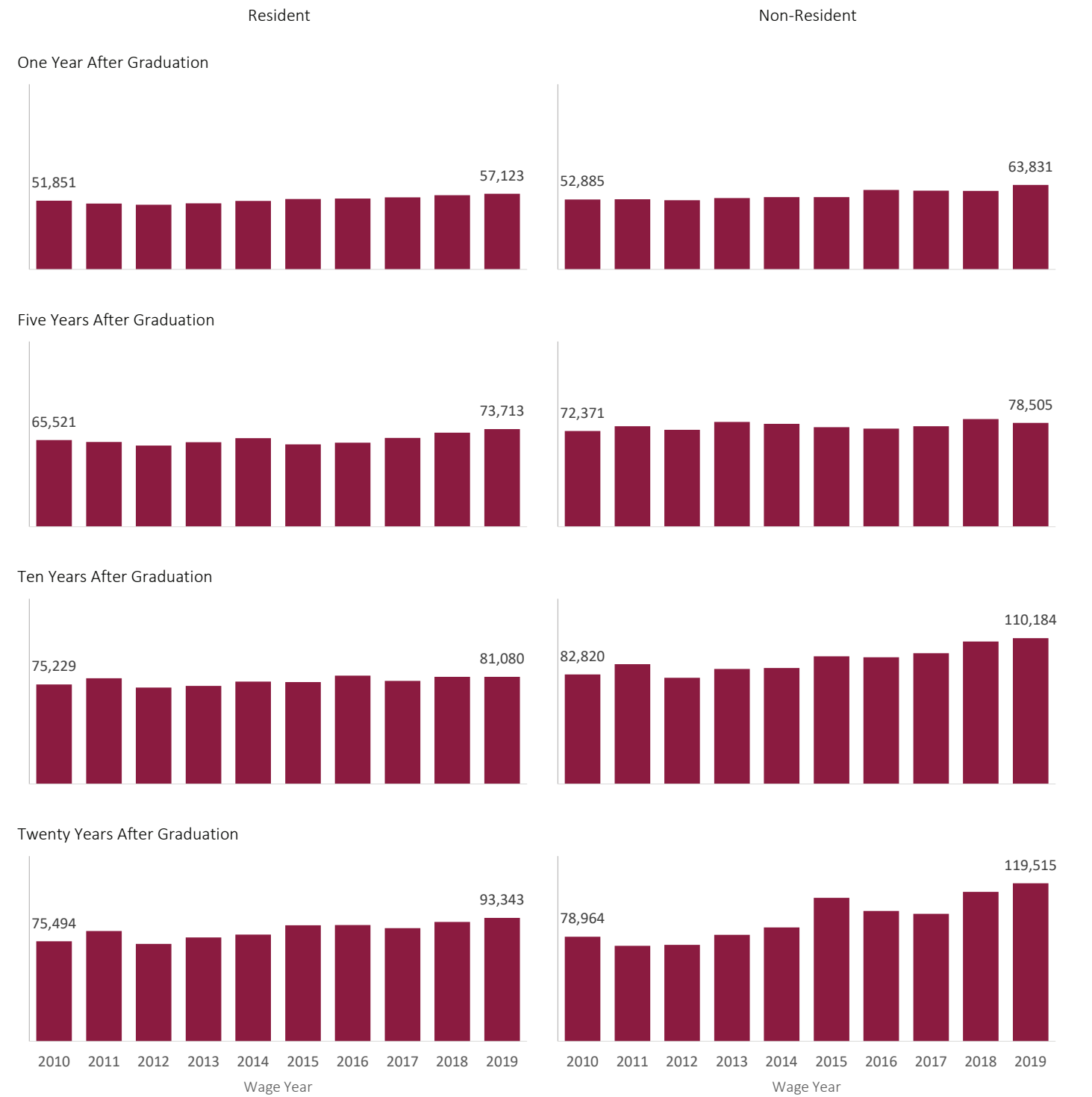
Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit ASU.W.5: Median Arizona Wages of Undergraduate Degree Recipients Over Last Ten Years



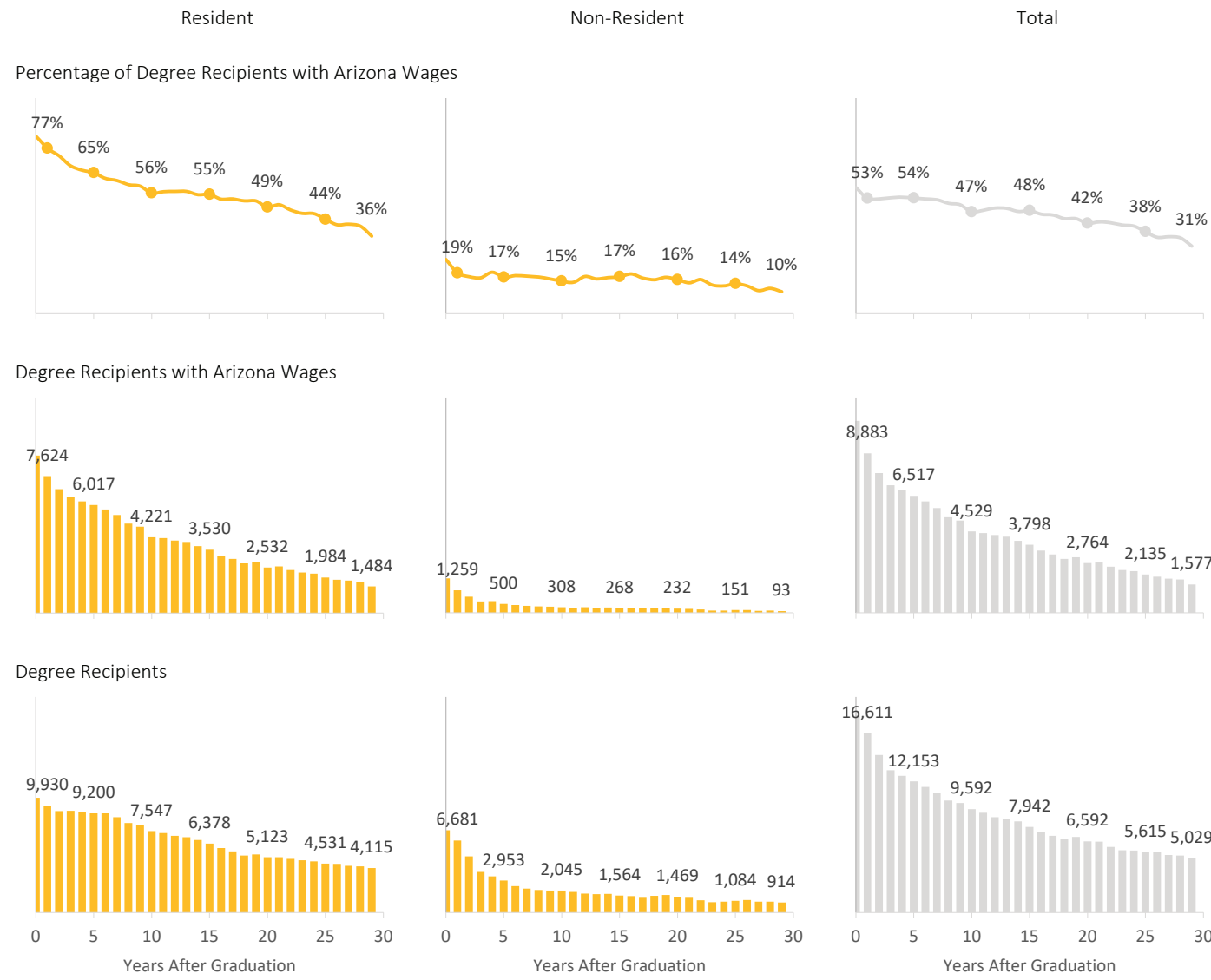
Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit ASU.W.6: Median Arizona Wages of Graduate Degree Recipients Over Last Ten Years



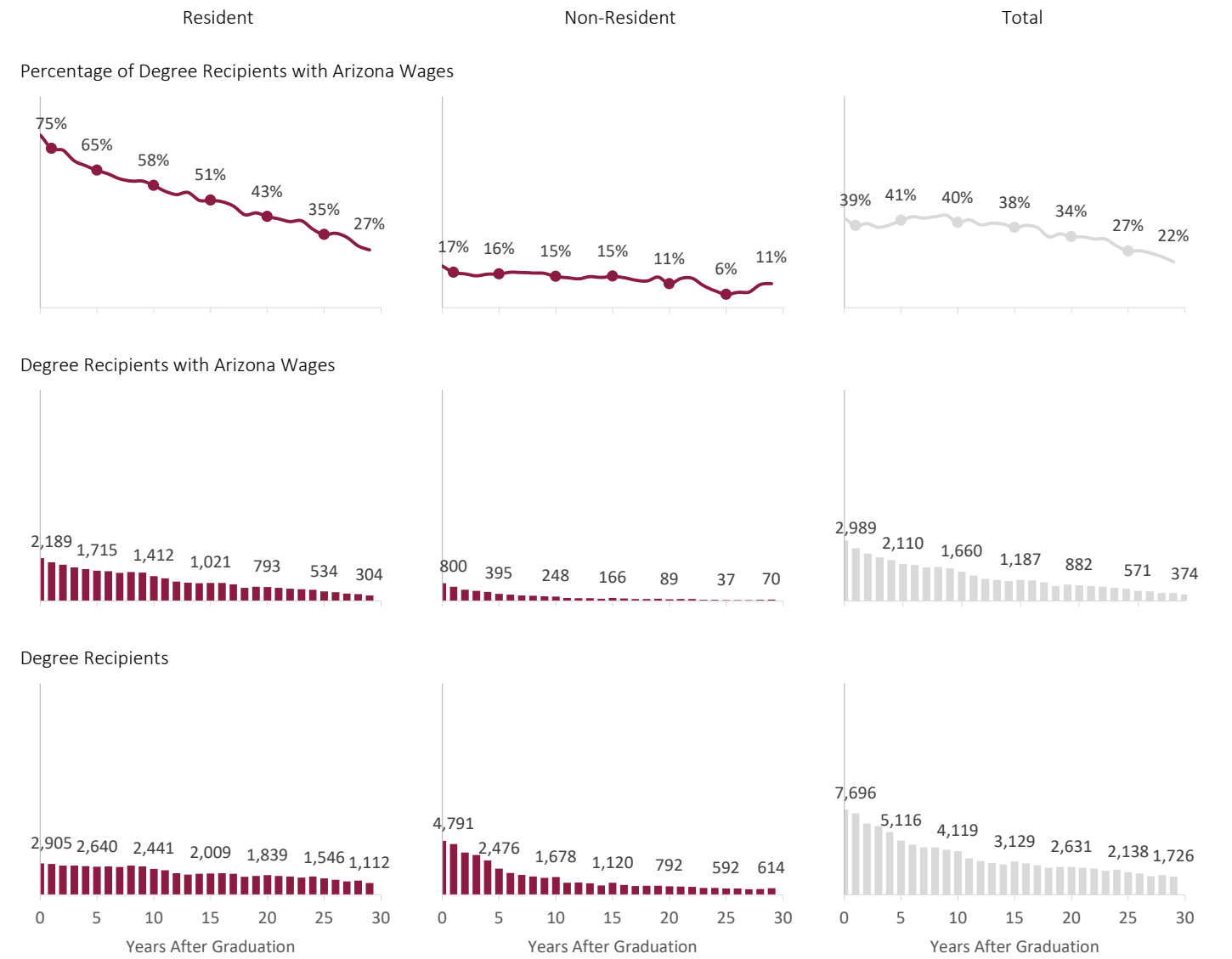
Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit ASU.W.7: Arizona Workforce Persistence of Undergraduate Degree Recipients by Year After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Exhibit ASU.W.8: Arizona Workforce Persistence of Graduate Degree Recipients by Year After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Exhibit ASU.W.9: Median Arizona Wages of 2014-2018 Undergraduate Degree Recipients by Instructional Program

Classification of Instructional Program (CIP)	With Arizona Wages	
	Graduates	
52 Business, Management, Marketing, and Related Support Services	11,929	5,053
09 Communication, Journalism, and Related Programs	5,694	2,196
14 Engineering	5,132	2,179
51 Health Professions and Related Programs	4,225	2,140
13 Education	3,228	2,139
26 Biological and Biomedical Sciences	4,609	1,943
45 Social Sciences	5,613	1,878
42 Psychology	4,209	1,807
30 Interdisciplinary Studies	3,633	1,561
50 Visual and Performing Arts	3,407	1,332
43 Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	2,687	1,314
11 Computer and Information Sciences and Support Services	2,107	1,172
19 Family, Consumer, and Human Sciences	2,517	1,042
31 Parks, Recreation, Leisure, and Fitness Studies	2,000	960
23 English Language, Literature, and Letters	1,660	658
44 Public Administration and Social Service Professions	1,025	548
54 History	950	312
04 Architecture and Related Services	784	293
41 Science Technologies and Technicians	518	284
22 Legal Professions and Studies	617	278
24 Liberal Arts and Sciences, General Studies, and Humanities	1,138	272
27 Mathematics and Statistics	655	259
40 Physical Sciences	607	243
15 Engineering Technologies and Engineering Related Fields	423	214
16 Foreign Languages, Literatures, and Linguistics	562	178
03 Natural Resources and Conservation	419	173
10 Communications Technologies, Technicians, and Support Services	241	129
05 Area, Ethnic, Cultural, Gender, and Group Studies	214	105
38 Philosophy and Religious Studies	346	104
49 Transportation and Materials Moving	338	104
01 Agriculture, Agriculture Operations, and Related Sciences	69	29
25 Library Science		
Total	69,260	30,050

Exhibit ASU.W.9: Median Arizona Wages of 2014-2018 Undergraduate Degree Recipients by Instructional Program (Continued)

Instructional Program	Workforce Persistence			With Student Loan Debt	Median Student Loan Debt	Median Wages	Debt-to-Income Ratio	
	All	Res	Non-Res					
	42%	59%	14%	2,998	25%	\$18,750	\$56,188	4.1%
	39%	57%	13%	1,522	27%	\$19,500	\$46,322	5.2%
	42%	55%	13%	1,350	26%	\$23,000	\$71,649	3.9%
	51%	64%	16%	1,541	36%	\$21,640	\$60,701	4.4%
	66%	72%	33%	1,466	45%	\$18,000	\$48,434	4.6%
	42%	46%	17%	1,296	28%	\$20,500	\$40,058	6.3%
	33%	50%	9%	1,312	23%	\$21,000	\$46,797	5.5%
	43%	58%	11%	1,269	30%	\$18,750	\$39,536	5.8%
	43%	57%	13%	1,078	30%	\$22,262	\$47,283	5.8%
	39%	50%	12%	931	27%	\$21,250	\$39,544	6.6%
	49%	67%	13%	922	34%	\$18,500	\$45,344	5.0%
	56%	64%	19%	713	34%	\$19,500	\$74,715	3.2%
	41%	54%	12%	788	31%	\$22,000	\$39,328	6.9%
	48%	55%	21%	662	33%	\$20,500	\$39,466	6.4%
	40%	55%	8%	474	29%	\$20,500	\$41,872	6.0%
	53%	63%	16%	419	41%	\$20,000	\$41,317	5.9%
	33%	54%	5%	206	22%	\$21,250	\$43,129	6.0%
	37%	55%	15%	202	26%	\$20,775	\$50,513	5.0%
	55%	70%	10%	200	39%	\$23,264	\$61,858	4.6%
	45%	54%	17%	196	32%	\$18,500	\$45,846	4.9%
	24%	59%	5%	199	17%	\$25,000	\$50,496	6.1%
	40%	47%	15%	174	27%	\$23,001	\$56,807	5.0%
	40%	46%	15%	168	28%	\$25,435	\$47,099	6.6%
	51%	65%	19%	148	35%	\$29,000	\$71,012	5.0%
	32%	41%	5%	120	21%	\$18,625	\$40,308	5.7%
	41%	49%	22%	100	24%	\$20,510	\$42,928	5.9%
	54%	64%	19%	89	37%	\$18,500	\$41,901	5.4%
	49%	53%	23%	78	36%	\$25,000	\$42,000	7.3%
	30%	41%	9%	73	21%	\$21,149	\$39,829	6.5%
	31%	39%	15%	84	25%	\$25,000	\$45,416	6.8%
	42%	51%	27%	17	25%	\$18,750	\$44,360	5.2%
Total	43%	57%	13%	20,795	30%	\$20,290	\$49,320	5.0%

Note: Classification of Instructional Program (CIP) codes listed reflect all degree programs offered by Arizona public universities. Exhibit is sorted by the number of graduates employed in Arizona. Values with five or less graduates are redacted and marked 'R'. Median wages reported include only graduates with Arizona wages in all four quarters of the year. Debt-to-income ratio calculations use the average unsubsidized student loan rate over the 5-year period and assume a standard 10-year repayment schedule. The debt-to-income ratios are calculated as follows:

$$\text{Debt-to-Income Ratio} = \text{Monthly Payment} / \text{Monthly Income} = (\text{Student Loan Amount} / (((1+i)^n - 1) / (i(1+i)^n))) / (\text{Annual Income} / 12)$$

where i = average student loan rate / 12 and n = 120, the total number of student loan payments.





Northern Arizona University

Exhibit NAU.W.1: Cumulative Undergraduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation

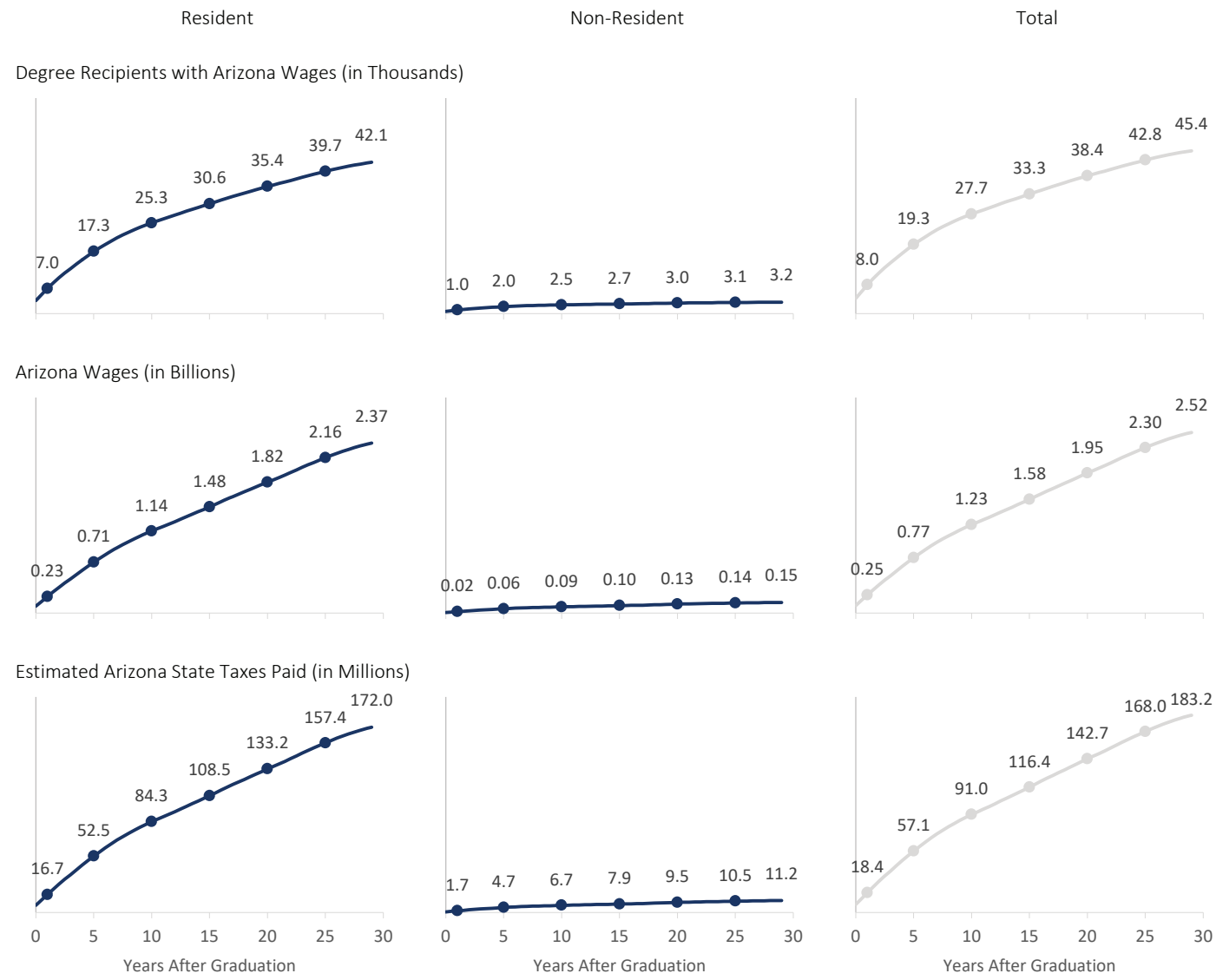
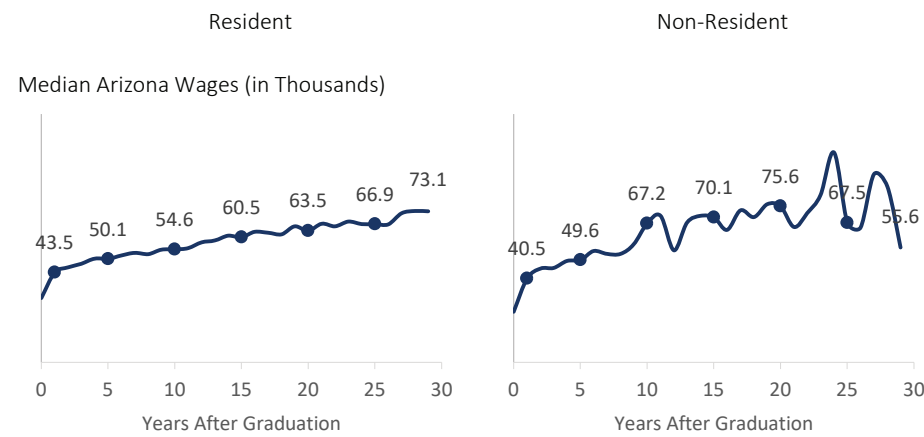


Exhibit NAU.W.2: Median Arizona Wages of Undergraduate Degree Recipients by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Northern Arizona University

Exhibit NAU.W.3: Cumulative Graduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation

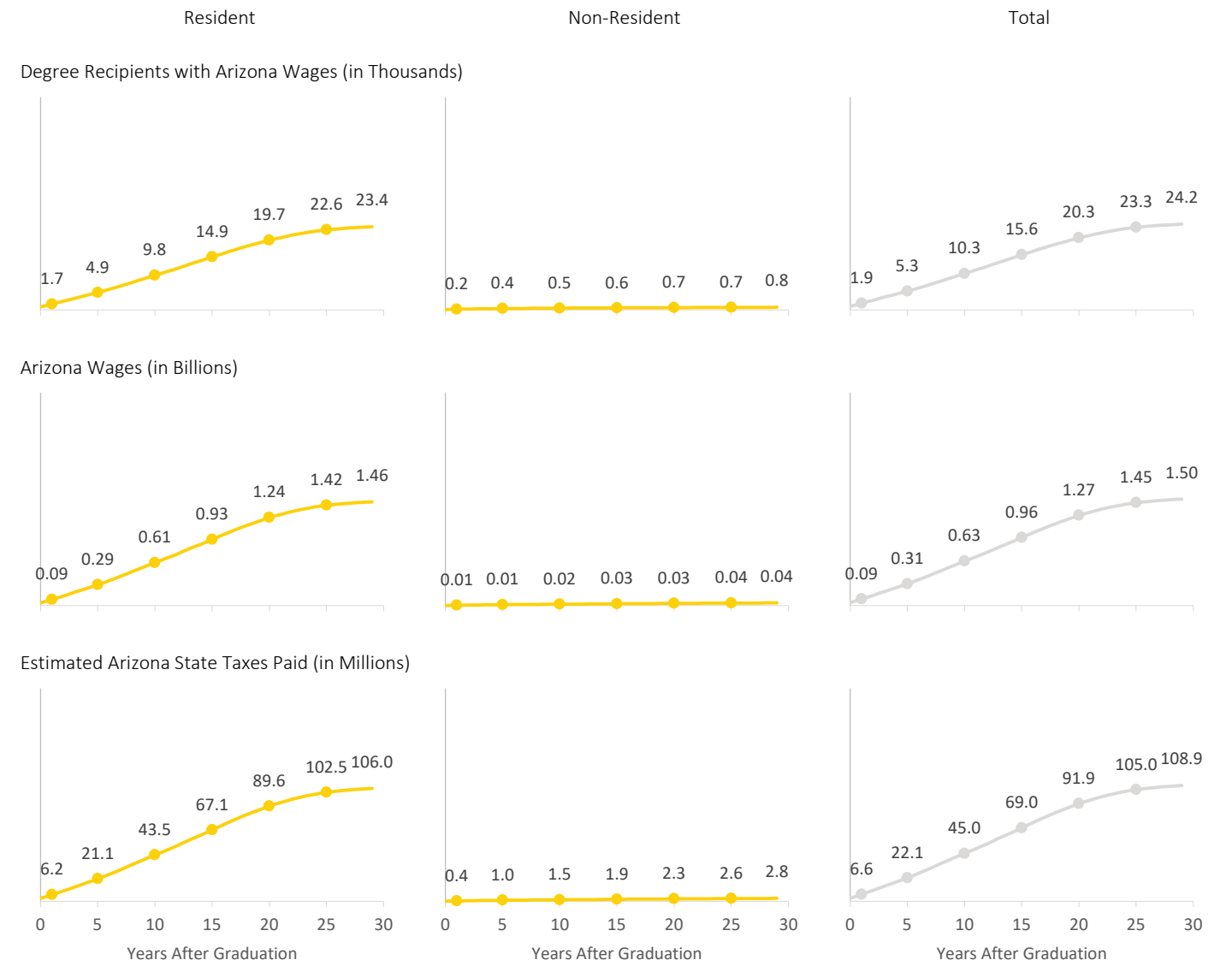
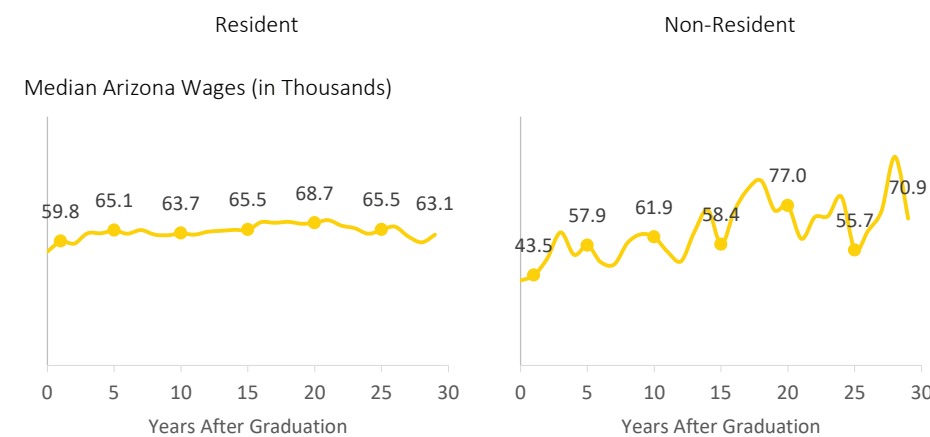
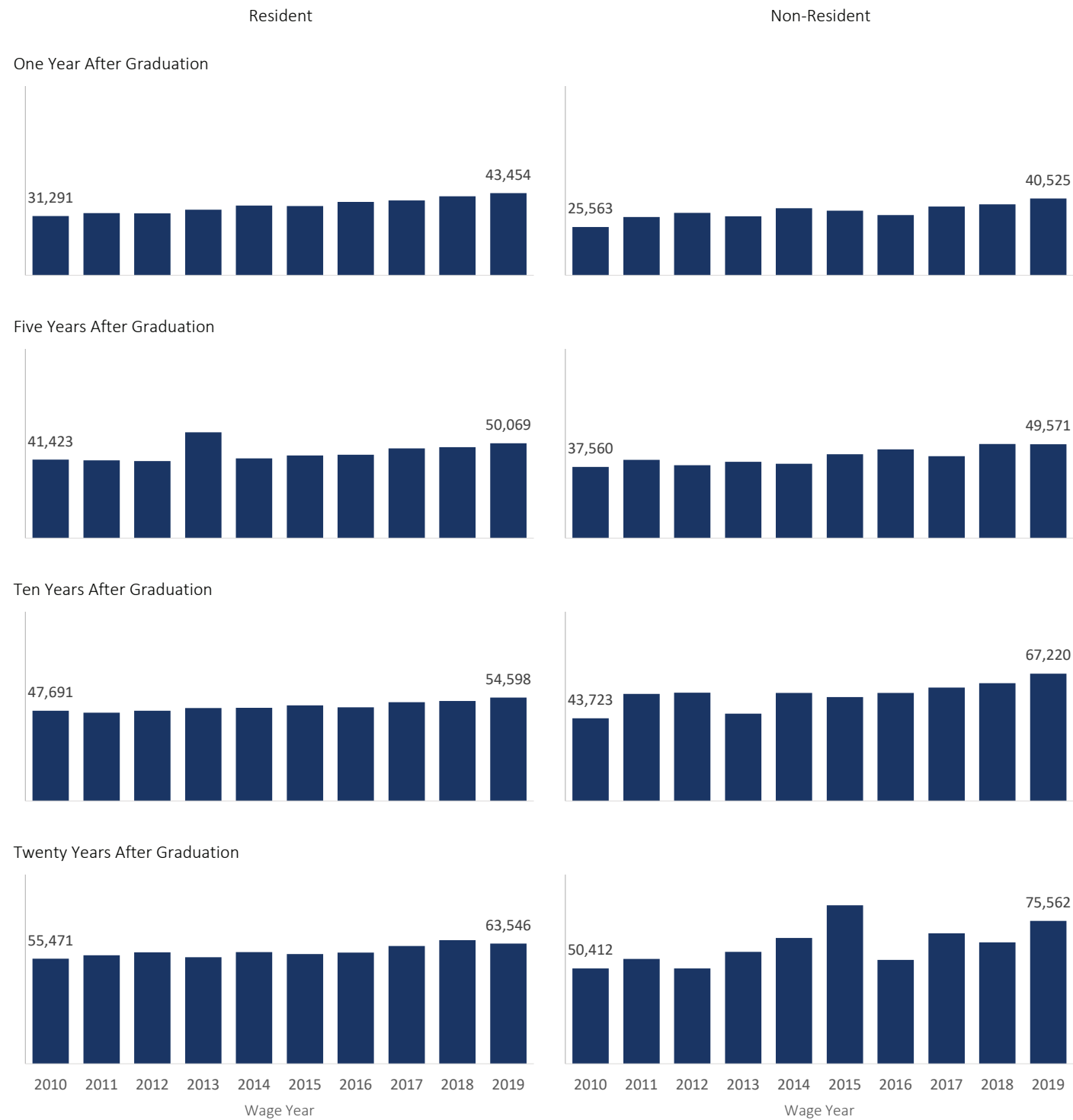


Exhibit NAU.W.4: Median Arizona Wages of Graduate Degree Recipients by Years After Graduation



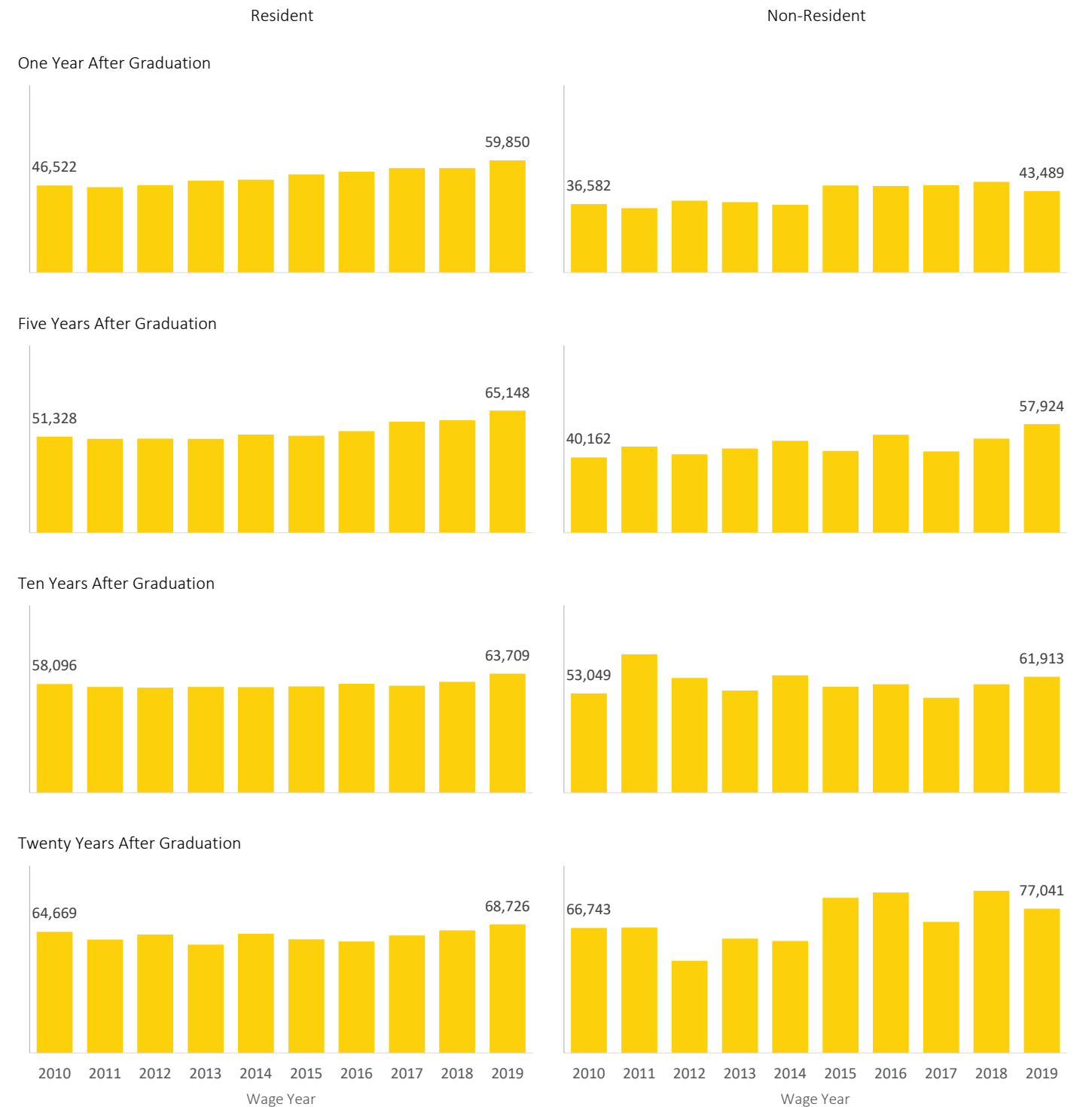
Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit NAU.W.5: Median Arizona Wages of Undergraduate Degree Recipients Over Last Ten Years



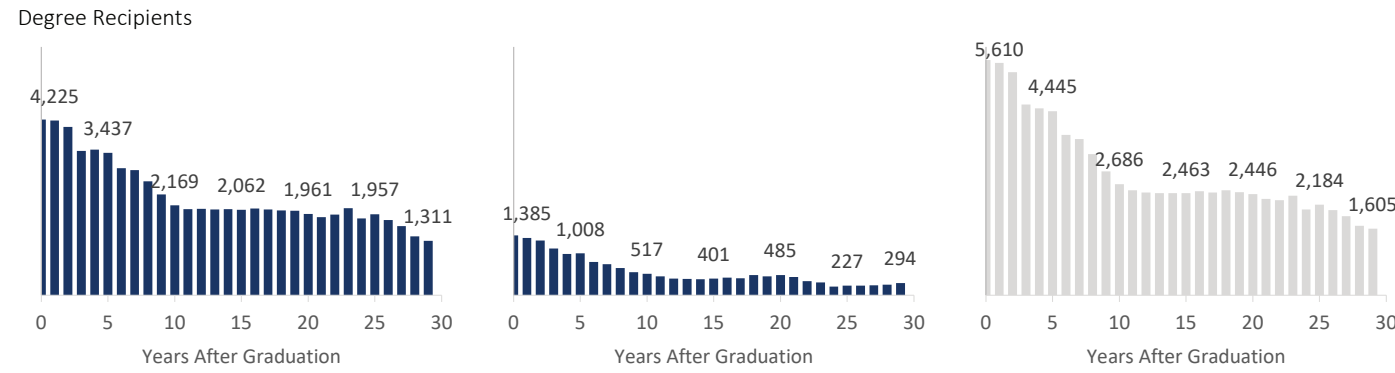
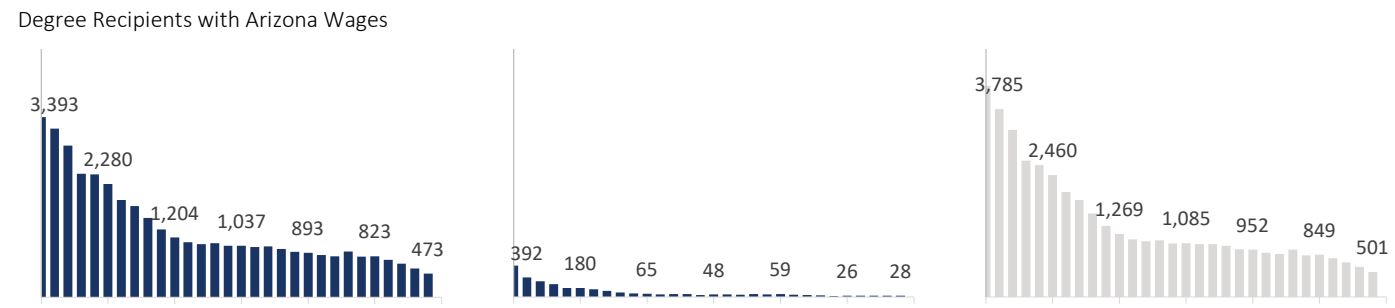
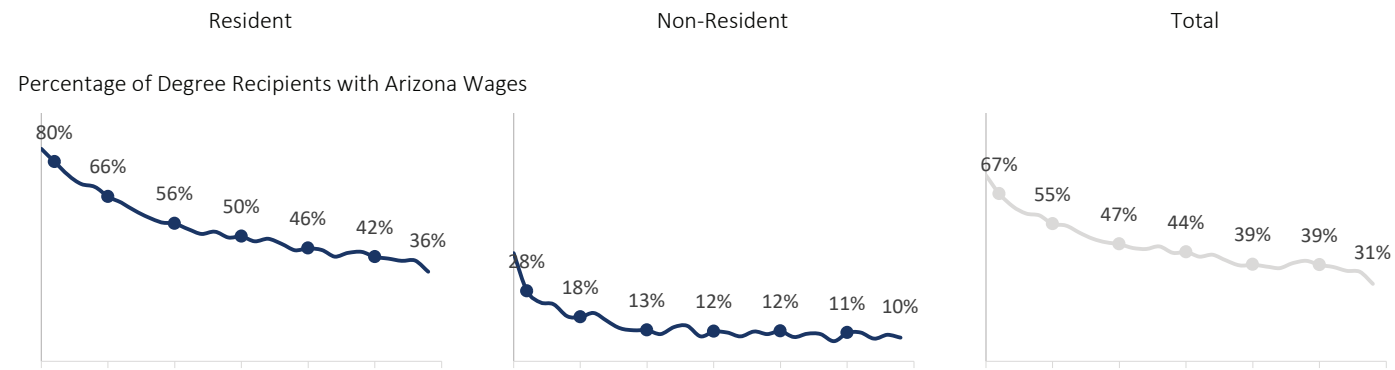
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Exhibit NAU.W.6: Median Arizona Wages of Graduate Degree Recipients Over Last Ten Years



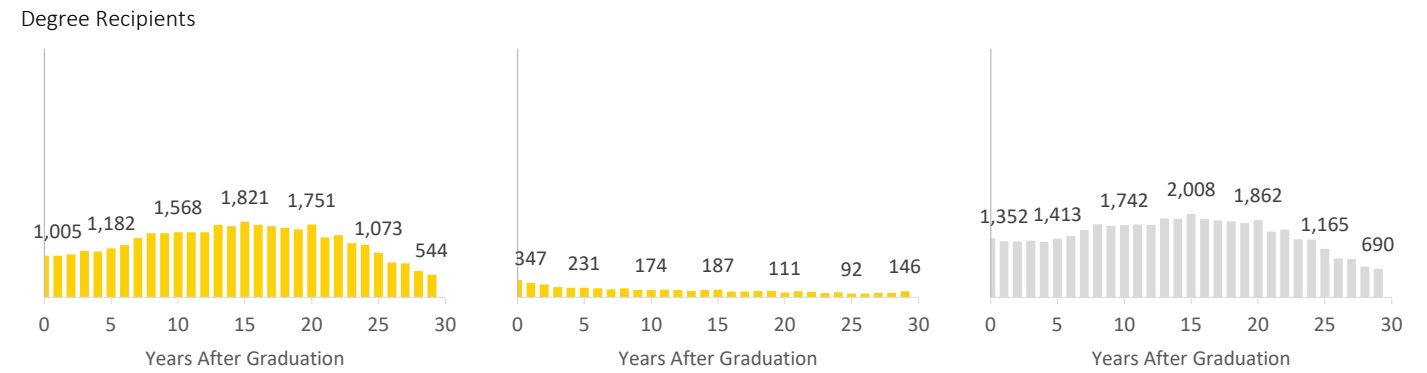
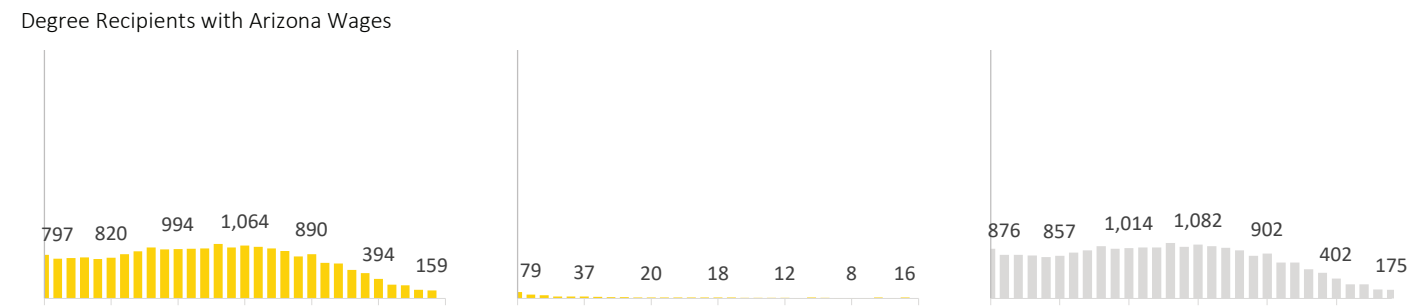
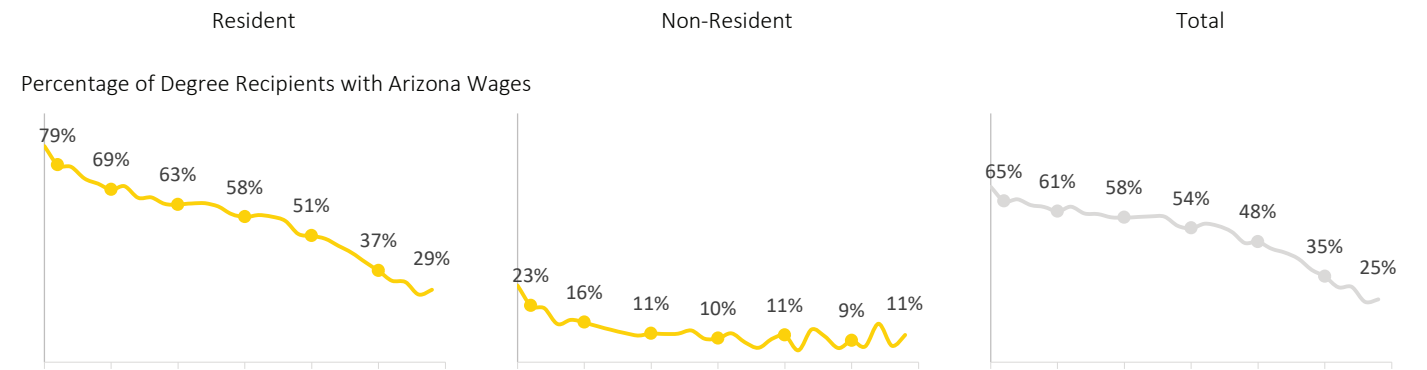
Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit NAU.W.7: Arizona Workforce Persistence of Undergraduate Degree Recipients by Year After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Exhibit NAU.W.8: Arizona Workforce Persistence of Graduate Degree Recipients by Year After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Northern Arizona University

Exhibit NAU.W.9: Median Arizona Wages of 2014-2018 Undergraduate Degree Recipients by Instructional Program

Classification of Instructional Program (CIP)	Graduates	With Arizona Wages
51 Health Professions and Related Programs	3,483	2,266
52 Business, Management, Marketing, and Related Support Services	4,332	2,058
13 Education	2,697	1,704
24 Liberal Arts and Sciences, General Studies, and Humanities	2,825	1,616
45 Social Sciences	1,959	788
26 Biological and Biomedical Sciences	1,694	670
42 Psychology	1,151	552
09 Communication, Journalism, and Related Programs	1,219	464
50 Visual and Performing Arts	864	377
14 Engineering	1,002	354
31 Parks, Recreation, Leisure, and Fitness Studies	858	305
41 Science Technologies and Technicians	453	275
44 Public Administration and Social Service Professions	419	213
03 Natural Resources and Conservation	536	169
40 Physical Sciences	499	164
23 English Language, Literature, and Letters	280	115
30 Interdisciplinary Studies	257	105
11 Computer and Information Sciences and Support Services	222	82
16 Foreign Languages, Literatures, and Linguistics	204	82
27 Mathematics and Statistics	121	55
54 History	147	47
05 Area, Ethnic, Cultural, Gender, and Group Studies	46	20
38 Philosophy and Religious Studies	64	20
22 Legal Professions and Studies	36	12
01 Agriculture, Agriculture Operations, and Related Sciences		
04 Architecture and Related Services		
10 Communications Technologies, Technicians, and Support Services		
15 Engineering Technologies and Engineering Related Fields		
19 Family, Consumer, and Human Sciences		
25 Library Science		
43 Homeland Security, Law Enforcement, Firefighting, and Related Protective Services		
49 Transportation and Materials Moving		
<b>Total</b>	<b>24,902</b>	<b>12,313</b>

Northern Arizona University

Exhibit NAU.W.9: Median Arizona Wages of 2014-2018 Undergraduate Degree Recipients by Instructional Program (Continued)

Workforce Persistence	With Student Loan Debt		Median Student Loan Debt	Median Wages	Debt-to-Income Ratio		
	All	Res				Non-Res	
65%	71%	18%	1,699	\$21,276	\$63,663	4.1%	
48%	61%	18%	1,373	\$20,080	\$51,248	4.8%	
63%	69%	31%	1,290	\$21,263	\$46,990	5.6%	
57%	62%	10%	1,122	\$14,883	\$46,893	3.9%	
40%	54%	15%	601	\$22,266	\$39,240	7.0%	
40%	47%	17%	514	\$24,178	\$36,023	8.2%	
48%	57%	17%	451	\$20,289	\$36,438	6.8%	
38%	54%	12%	349	\$22,334	\$40,034	6.8%	
44%	51%	19%	287	\$24,344	\$35,962	8.3%	
35%	51%	12%	285	\$26,716	\$68,293	4.8%	
36%	48%	13%	219	\$22,427	\$34,769	7.9%	
61%	63%	6%	208	\$21,769	\$45,965	5.8%	
51%	64%	18%	187	\$19,839	\$39,926	6.1%	
32%	40%	14%	123	\$21,276	\$36,017	7.2%	
33%	44%	14%	131	\$26,756	\$42,340	7.8%	
41%	52%	11%	85	\$21,273	\$32,735	8.0%	
41%	52%	8%	82	\$24,843	\$32,949	9.2%	
37%	48%	8%	69	\$23,808	\$70,628	4.1%	
40%	46%	11%	59	\$22,778	\$39,556	7.1%	
45%	59%	3%	32	\$20,069	\$40,669	6.1%	
32%	43%	14%	33	\$18,882	\$32,903	7.0%	
43%	51%	11%	14	\$25,485	\$23,039	13.6%	
31%	37%	8%	19	\$21,171	\$42,973	6.0%	
33%	41%	21%	R	R	\$31,619	R	
<b>Total</b>	<b>49%</b>	<b>60%</b>	<b>16%</b>	<b>9,077</b>	<b>\$20,782</b>	<b>\$47,179</b>	<b>5.4%</b>

Note: Classification of Instructional Program (CIP) codes listed reflect all degree programs offered by Arizona public universities. Exhibit is sorted by the number of graduates employed in Arizona. Values with five or less graduates are redacted and marked 'R'. Median wages reported include only graduates with Arizona wages in all four quarters of the year. Debt-to-income ratio calculations use the average unsubsidized student loan rate over the 5-year period and assume a standard 10-year repayment schedule. The debt-to-income ratios are calculated as follows:

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where i = average student loan rate / 12 and n = 120, the total number of student loan payments.



University of Arizona

Exhibit UA.W.1: Cumulative Undergraduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation

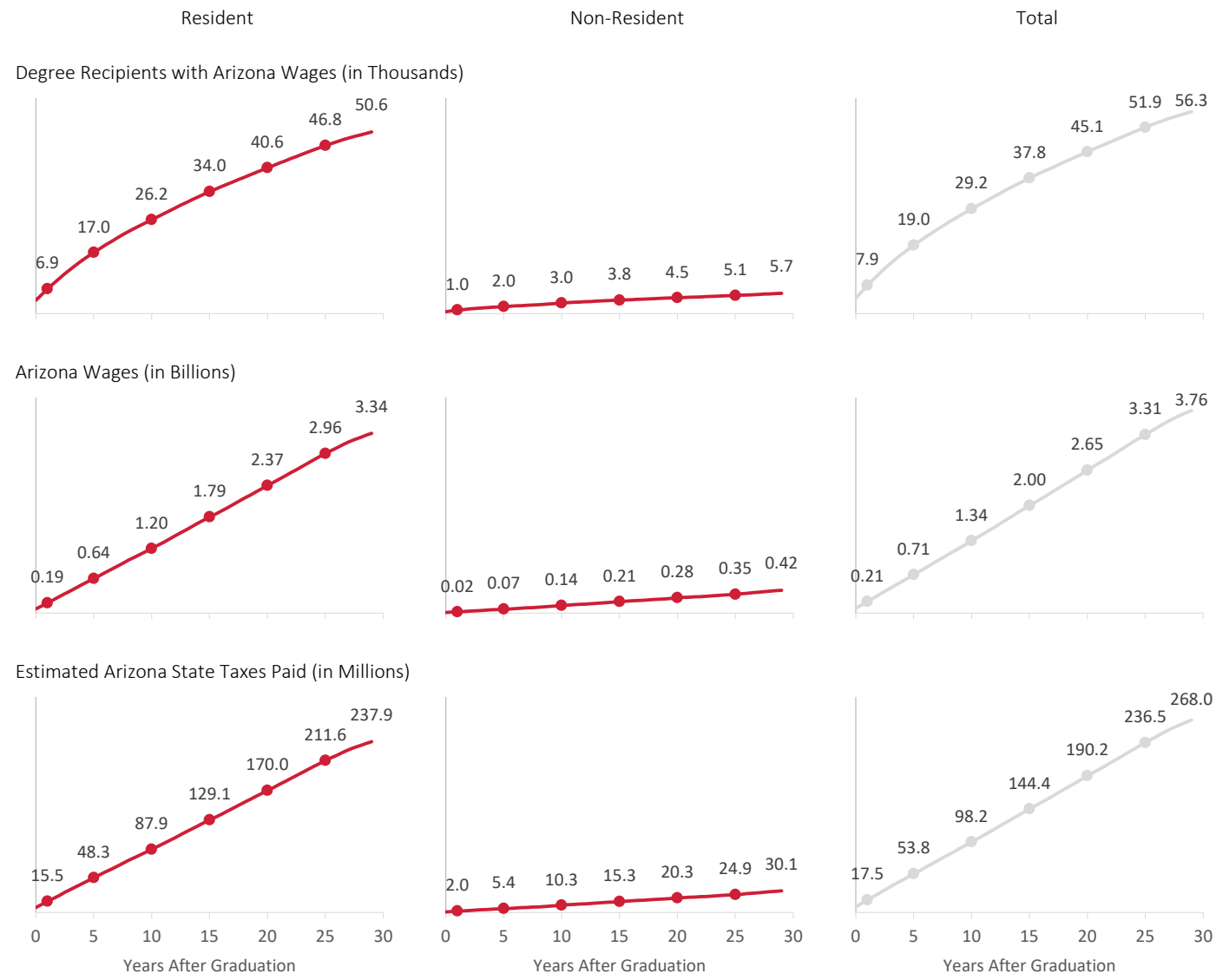
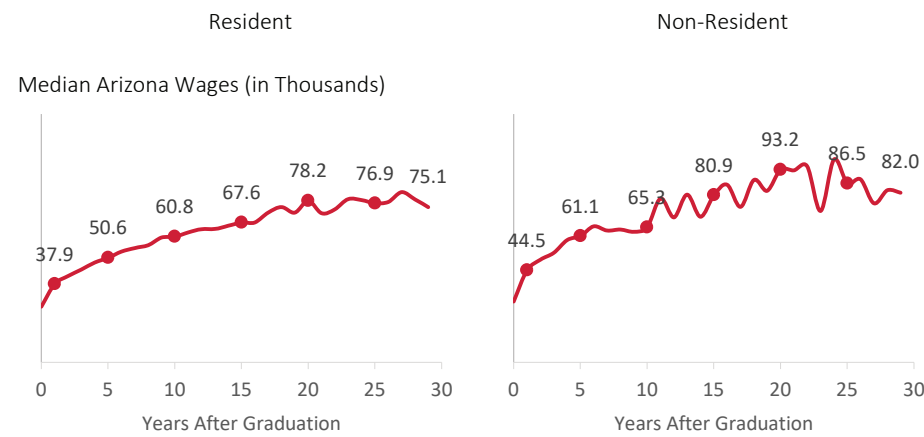


Exhibit UA.W.2: Median Arizona Wages of Undergraduate Degree Recipients by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

University of Arizona

Exhibit UA.W.3: Cumulative Graduate Degree Recipients, Wages and Estimated State Taxes by Years After Graduation

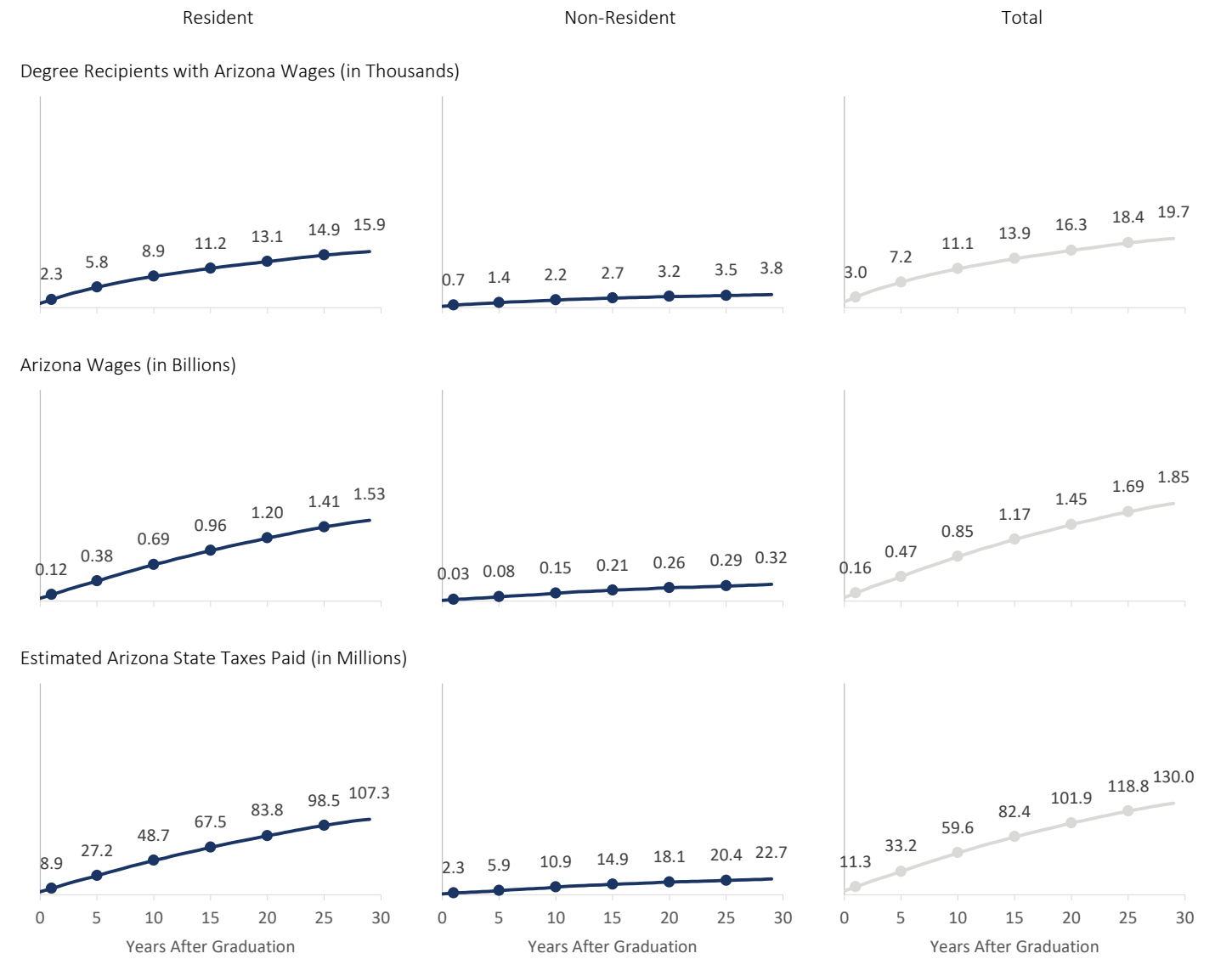
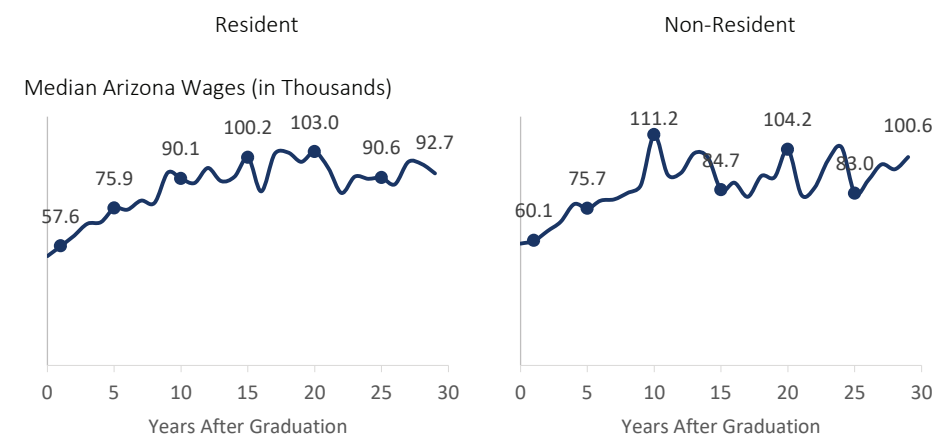
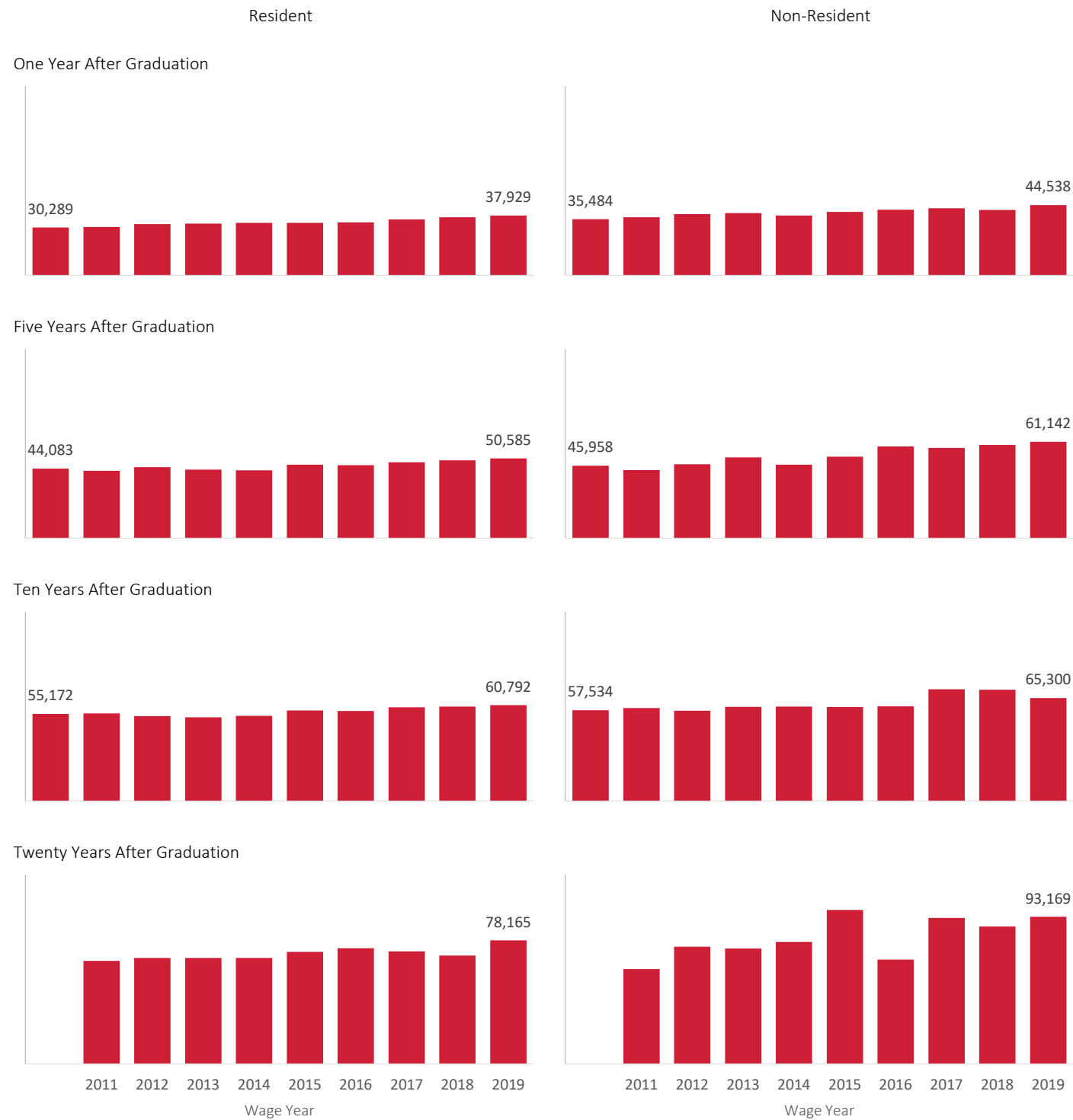


Exhibit UA.W.4: Median Arizona Wages of Graduate Degree Recipients by Years After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

Exhibit UA.W.5: Median Arizona Wages of Undergraduate Degree Recipients Over Last Ten Years



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

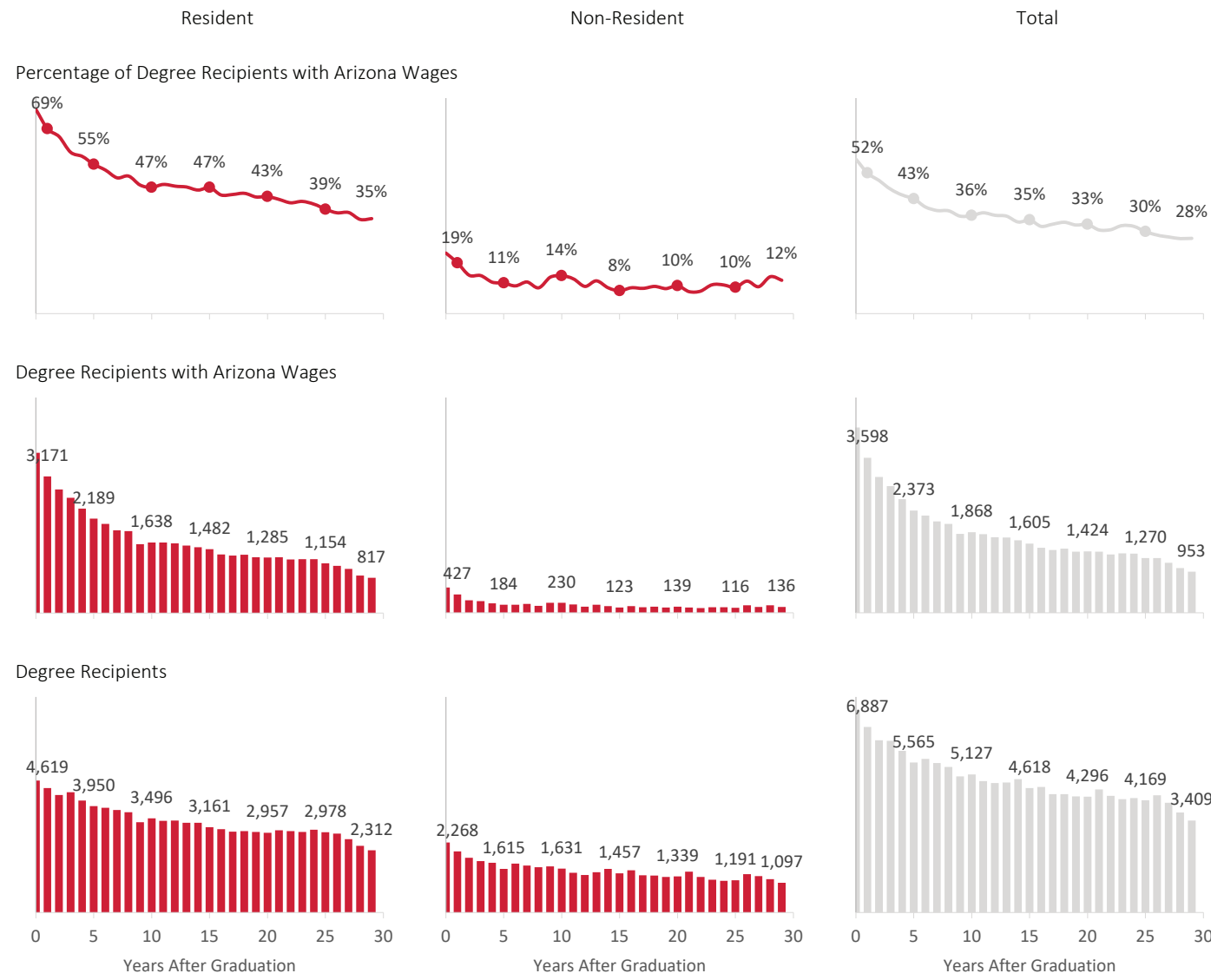
Exhibit UA.W.6: Median Arizona Wages of Graduate Degree Recipients Over Last Ten Years



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded. Median wage calculations include only graduates that earned wages in Arizona in all four quarters of the year.

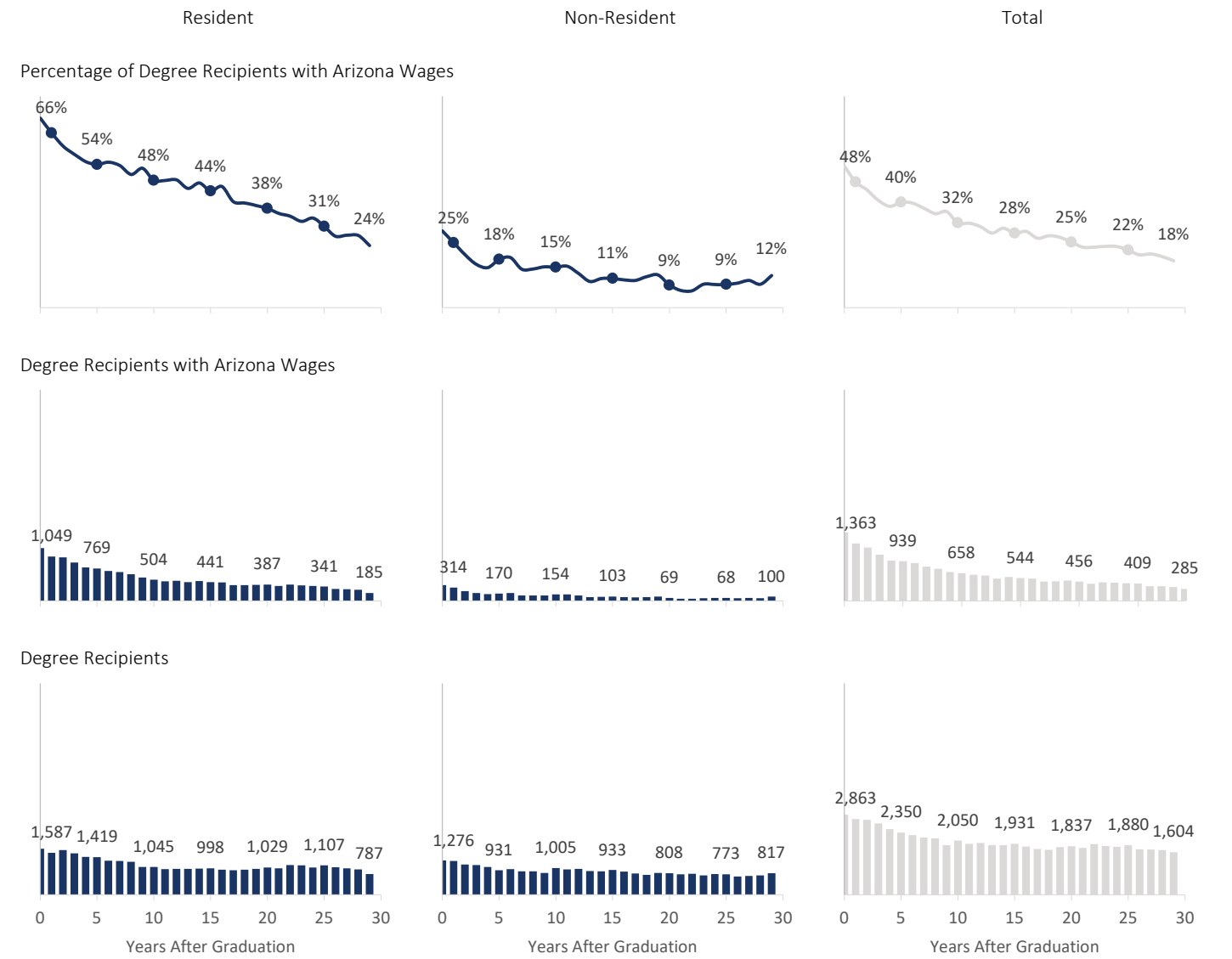


Exhibit UA.W.7: Arizona Workforce Persistence of Undergraduate Degree Recipients by Year After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Exhibit UA.W.8: Arizona Workforce Persistence of Graduate Degree Recipients by Year After Graduation



Note: Degree recipients are included in only one program level and one graduation year based upon their highest degree awarded.

Exhibit UA.W.9: Median Arizona Wages of 2014-2018 Undergraduate Degree Recipients by Instructional Program

Classification of Instructional Program (CIP)	Graduates	With Arizona Wages
52 Business, Management, Marketing, and Related Support Services	4,706	1,576
26 Biological and Biomedical Sciences	2,993	1,017
42 Psychology	2,357	1,004
51 Health Professions and Related Programs	2,309	992
14 Engineering	2,106	855
13 Education	1,387	765
30 Interdisciplinary Studies	2,331	765
45 Social Sciences	2,798	728
09 Communication, Journalism, and Related Programs	1,625	466
11 Computer and Information Sciences and Support Services	1,029	384
50 Visual and Performing Arts	1,300	375
16 Foreign Languages, Literatures, and Linguistics	855	364
19 Family, Consumer, and Human Sciences	718	335
01 Agriculture, Agriculture Operations, and Related Sciences	577	271
23 English Language, Literature, and Letters	647	269
43 Homeland Security, Law Enforcement, Firefighting, and Related Protective Services	460	233
44 Public Administration and Social Service Professions	440	197
40 Physical Sciences	704	196
04 Architecture and Related Services	607	187
54 History	411	166
03 Natural Resources and Conservation	382	153
41 Science Technologies and Technicians	242	141
05 Area, Ethnic, Cultural, Gender, and Group Studies	355	136
38 Philosophy and Religious Studies	384	123
27 Mathematics and Statistics	450	122
22 Legal Professions and Studies	132	55
15 Engineering Technologies and Engineering Related Fields	115	40
10 Communications Technologies, Technicians, and Support Services		
24 Liberal Arts and Sciences, General Studies, and Humanities		
25 Library Science		
31 Parks, Recreation, Leisure, and Fitness Studies		
49 Transportation and Materials Moving		
<b>Total</b>	<b>31,213</b>	<b>11,483</b>

Exhibit UA.W.9: Median Arizona Wages of 2014-2018 Undergraduate Degree Recipients by Instructional Program (Continued)

Workforce Persistence	With Student Loan Debt		Median Student Loan Debt	Median Wages	Debt-to-Income Ratio		
	All	Res				Non-Res	
33%	49%	11%	2,130	\$21,170	\$57,540	4.5%	
34%	38%	11%	1,429	\$20,782	\$35,408	7.2%	
43%	54%	9%	1,367	\$20,292	\$38,293	6.5%	
43%	50%	13%	1,383	\$21,272	\$41,398	6.3%	
41%	50%	13%	970	\$23,257	\$73,709	3.9%	
55%	66%	20%	804	\$20,286	\$44,927	5.5%	
33%	50%	8%	1,180	\$23,010	\$39,494	7.1%	
26%	44%	6%	1,284	\$22,485	\$42,930	6.4%	
29%	50%	10%	797	\$23,059	\$44,134	6.4%	
37%	47%	10%	492	\$24,739	\$70,131	4.3%	
29%	38%	6%	737	\$21,282	\$32,481	8.0%	
43%	48%	13%	530	\$19,773	\$37,061	6.5%	
47%	56%	10%	430	\$19,298	\$38,240	6.2%	
47%	54%	14%	306	\$20,458	\$47,526	5.3%	
42%	48%	11%	356	\$21,336	\$35,140	7.4%	
51%	61%	14%	304	\$19,289	\$39,928	5.9%	
45%	57%	9%	294	\$20,359	\$45,142	5.5%	
28%	38%	6%	333	\$24,740	\$54,791	5.5%	
31%	51%	9%	292	\$26,562	\$52,015	6.3%	
40%	50%	8%	218	\$20,517	\$41,370	6.1%	
40%	47%	11%	227	\$22,262	\$38,000	7.2%	
58%	60%	10%	145	\$20,767	\$55,023	4.6%	
38%	47%	7%	229	\$22,480	\$35,941	7.7%	
32%	40%	7%	206	\$21,927	\$37,668	7.1%	
27%	37%	8%	180	\$21,317	\$54,209	4.8%	
42%	54%	6%	70	\$23,154	\$33,286	8.5%	
35%	49%	5%	54	\$26,819	\$69,795	4.7%	
<b>Total</b>	<b>37%</b>	<b>49%</b>	<b>10%</b>	<b>16,102</b>	<b>\$21,354</b>	<b>\$44,888</b>	<b>5.8%</b>

Note: Classification of Instructional Program (CIP) codes listed reflect all degree programs offered by Arizona public universities. Exhibit is sorted by the number of graduates employed in Arizona. Values with five or less graduates are redacted and marked 'R'. Median wages reported include only graduates with Arizona wages in all four quarters of the year. Debt-to-income ratio calculations use the average unsubsidized student loan rate over the 5-year period and assume a standard 10-year repayment schedule. The debt-to-income ratios are calculated as follows:

$$\text{Debt-to-Income Ratio} = \text{Monthly Payment} / \text{Monthly Income} = (\text{Student Loan Amount} / (((1+i)^n)-1) / (i(1+i)^n)) / (\text{Annual Income} / 12)$$

where i = average student loan rate / 12 and n = 120, the total number of student loan payments.

Exhibit UA.W.10: Median Arizona Wages of 2014-2018 Graduate Degree Recipients by Instructional Program

Classification of Instructional Program (CIP)	Graduates	With Arizona Wages
51 Health Professions and Related Programs	3,617	1,485
13 Education	1,210	629
52 Business, Management, Marketing, and Related Support Services	1,451	627
22 Legal Professions and Studies	773	324
14 Engineering	913	230
45 Social Sciences	748	161
25 Library Science	305	157
26 Biological and Biomedical Sciences	530	138
11 Computer and Information Sciences and Support Services	669	129
40 Physical Sciences	794	124
44 Public Administration and Social Service Professions	153	70
50 Visual and Performing Arts	328	64
04 Architecture and Related Services	242	57
03 Natural Resources and Conservation	209	55
42 Psychology	187	49
05 Area, Ethnic, Cultural, Gender, and Group Studies	192	45
16 Foreign Languages, Literatures, and Linguistics	242	43
23 English Language, Literature, and Letters	163	37
15 Engineering Technologies and Engineering Related Fields	64	24
54 History	68	23
27 Mathematics and Statistics	126	22
01 Agriculture, Agriculture Operations, and Related Sciences	81	17
38 Philosophy and Religious Studies	52	14
30 Interdisciplinary Studies	34	10
09 Communication, Journalism, and Related Programs	61	8
19 Family, Consumer, and Human Sciences	28	8
10 Communications Technologies, Technicians, and Support Services		
24 Liberal Arts and Sciences, General Studies, and Humanities		
31 Parks, Recreation, Leisure, and Fitness Studies		
41 Science Technologies and Technicians		
43 Homeland Security, Law Enforcement, Firefighting, and Related Protective Services		
49 Transportation and Materials Moving		
<b>Total</b>	<b>13,227</b>	<b>4,549</b>

Exhibit UA.W.10: Median Arizona Wages of 2014-2018 Graduate Degree Recipients by Instructional Program (Continued)

Workforce Persistence	With Student Loan Debt		Median Student Loan Debt	Median Wages	Debt-to-Income Ratio	
	All	Res				Non-Res
41%	48%	16%	2,798	\$66,896	\$74,739	11.8%
52%	61%	20%	699	\$30,176	\$51,860	7.7%
43%	63%	18%	636	\$40,564	\$84,478	6.3%
42%	53%	24%	512	\$83,645	\$70,925	15.5%
25%	46%	12%	185	\$25,286	\$92,186	3.6%
22%	34%	8%	344	\$35,066	\$55,319	8.4%
51%	62%	11%	203	\$40,564	\$44,724	11.9%
26%	38%	9%	188	\$24,941	\$52,177	6.3%
19%	45%	12%	118	\$34,842	\$85,273	5.4%
16%	27%	10%	161	\$23,308	\$81,958	3.7%
46%	52%	15%	89	\$30,427	\$54,535	7.4%
20%	37%	11%	184	\$38,349	\$40,773	12.4%
24%	38%	10%	125	\$45,047	\$51,638	11.5%
26%	36%	15%	71	\$22,125	\$49,824	5.9%
26%	46%	6%	97	\$34,092	\$68,141	6.6%
23%	35%	13%	94	\$40,968	\$41,099	13.1%
18%	39%	7%	100	\$28,946	\$45,772	8.3%
23%	38%	17%	64	\$29,721	\$47,858	8.2%
38%	49%	20%	23	\$25,315	\$80,407	4.1%
34%	53%	17%	41	\$43,916	\$48,860	11.8%
17%	28%	14%	24	\$22,047	\$82,599	3.5%
21%	36%	10%	26	\$30,273	\$60,193	6.6%
27%	58%	9%	19	\$33,030	\$47,115	9.2%
29%	42%	13%	8	\$27,815	\$58,294	6.3%
13%	26%	5%	25	\$43,931	\$50,449	11.5%
29%	45%	18%	9	\$77,283	\$76,334	13.3%
<b>34%</b>	<b>49%</b>	<b>14%</b>	<b>6,835</b>	<b>\$47,215</b>	<b>\$65,813</b>	<b>9.5%</b>

Note: Classification of Instructional Program (CIP) codes listed reflect all degree programs offered by Arizona public universities. Exhibit is sorted by the number of graduates employed in Arizona. Values with five or less graduates are redacted and marked 'R'. Median wages reported include only graduates with Arizona wages in all four quarters of the year. Debt-to-income ratio calculations use the average unsubsidized student loan rate over the 5-year period and assume a standard 10-year repayment schedule. The debt-to-income ratios are calculated as follows:

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where i = average student loan rate / 12 and n = 120, the total number of student loan payments.

