

The Changing Profile of a Virginia Graduate: Course Taking and Achievement of Virginia Ninth Graders

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Appendix

Table 1A. Descriptive statistics.

	2015-16	2016-17	2017-18	2018-19
Race				
% White	52.91	51.34	50.98	50.66
% Asian	6.58	6.88	7.11	7.11
% Black	22.67	22.48	22.14	21.45
% Hispanic	12.83	14.05	14.28	15.08
% Other	5.01	5.24	5.49	5.69
% FRPL	36.61	37.49	38.36	38.12
Urbanicity				
% City	21.02	20.93	20.82	20.72
% Suburban	44.33	44.72	44.99	45.17
% Town	7.45	7.23	7.08	7.04
% Rural	27.19	27.12	27.11	27.07
# Student Observations	93,527	92,429	92,582	92,941
# Student-Course Observations	695,643	691,378	691,880	694,899

Table 2A. Course enrollments by subject. Most popular courses, all courses with enrollments over 10,000.

Course Name	Percentage Ninth Graders Enrolled			
	2015-16	2016-17	2017-18	2018-19
English 9	97.44	98.15	98.20	98.28
Phys Ed	95.63	95.93	95.76	95.82
World History & Geography to 1500 AD	73.07	71.88	71.34	72.01
Earth Science I	54.11	53.55	53.74	50.23
Biology	40.66	41.73	41.65	42.41
Algebra I	38.99	38.83	36.83	36.60
Geometry	32.40	32.55	33.46	33.52
Spanish II	22.87	23.58	23.43	23.60
Spanish I	21.91	21.14	21.12	20.74
Band/Chorus/Music Elective	19.51	19.09	18.99	18.59
Art	16.30	16.85	16.69	16.64
Algebra II	13.58	13.96	14.95	14.96
Algebra I - Pt 1	13.23	13.99	13.67	13.53
World History & Geography: 1500 AD-Present	11.73	10.02	10.93	9.04
World Geography	8.51	10.64	11.04	11.06
Algebra I - Pt 2	9.35	8.72	8.07	8.58

Table 3A. Percent of students enrolled in each math course by race.

Course Name	2015-16	2016-17	2017-18	2018-19
Algebra I				
White	31.53	30.66	29.53	29.09
Asian	23.58	22.48	21.79	21.57
Black	44.22	43.63	41.31	41.26
Hispanic	47.72	47.46	45.9	45.99
Algebra I, Part 1				
White	10.78	11.37	10.64	11.2
Asian	3.77	3.61	3.27	3.4
Black	16.72	18.3	19.12	17.64
Hispanic	15.18	15.43	16.06	15.46
Algebra I, Part 2				
White	8.76	8.4	7.78	8.52
Asian	1.38	1.28	0.88	1.11
Black	11.84	11.16	10.64	10.62
Hispanic	7.12	5.95	5.85	6.42
Geometry				
White	34.07	34.23	35.73	34.75
Asian	41.99	41.59	39.48	41.93
Black	20.82	20.62	21.87	23.67
Hispanic	24.42	25.53	26.21	25.79
Algebra II				
White	14.86	15.34	16.32	16.43
Asian	29.29	31.05	34.58	31.99
Black	6.41	6.28	7.07	6.81
Hispanic	5.56	5.62	5.99	6.34

Note. Within each year, adding up each percentage by race across these five courses will equal roughly 100%.

Table 4A. Percent of students enrolled FRPL in each math course by economic disadvantage status

Course Name	2015-16	2016-17	2017-18	2018-19
Algebra I				
FRPL	45.11	44.36	42.43	41.7
Non-FRPL	31.02	30.52	29.16	29.27
Algebra I, Part 1				
FRPL	18.39	19.91	20.14	19.51
Non-FRPL	8.6	8.6	8.08	8.31
Algebra I, Part 2				
FRPL	12.43	11.5	11.07	11.63
Non-FRPL	6.49	6.02	5.37	5.81
Geometry				
FRPL	19.15	18.95	20.65	21.32
Non-FRPL	36.79	37.25	38.16	37.76
Algebra II				
FRPL	4.92	5.28	5.7	5.85
Non-FRPL	17.1	17.6	19.24	18.85

Note. FRPL stands for free or reduced-price lunch. Within each year, adding up each percentage by FRPL status across these five courses will equal roughly 100%.

Table 5A. Percent of students enrolled in each math course by urbanicity.

Course Name	2015-16	2016-17	2017-18	2018-19
Algebra I				
City	39.09	37.7	34.53	33.61
Suburban	35.89	35.12	34.39	34.33
Town	37.53	33.53	33.34	34.81
Rural	34.66	36.35	34.54	34.05
Algebra I, Part 1				
City	9.17	11.32	11.71	10.15
Suburban	11.04	11.17	10.67	10.42
Town	14.42	18.31	17.61	17.51
Rural	15.95	15.59	15.8	16.85
Algebra I, Part 2				
City	8.07	6.17	5.94	6.41
Suburban	5.68	5.39	4.89	5.19
Town	13.18	15.6	13.29	14.18
Rural	12.84	11.93	11.65	12.26
Geometry				
City	27.36	28.53	30.72	31.67
Suburban	34.44	34.73	35.05	36.28
Town	24.82	21.89	25.31	21.92
Rural	26.84	26.39	27.19	25.68
Algebra II				
City	16.31	16.28	17.11	18.16
Suburban	12.96	13.6	15	13.79
Town	10.05	10.68	10.45	11.58
Rural	9.71	9.73	10.82	11.15

Note. Within each year, adding up each percentage by urbanicity across these five courses will equal roughly 100%.

Table 6A. Descriptive statistics on SOL Tests including number of tests taken by subject and year with the passing rate for each test. Only includes the top eight SOL tests taken by ninth graders in these years.

SOL Name	2015-16	2016-17	2017-18	2018-19
World History I				
# Tests	67,110	65,257	64,848	62,662
Passing Rate	85.09	85.99	83.81	81.74
Earth Science				
# Tests	51,654	50,455	51,070	46,000
Passing Rate	84.25	82.87	82.06	82.49
Biology				
# Tests	39,746	39,719	39,634	40,520
Passing Rate	87.60	86.01	86.54	87.81
Algebra I				
# Tests	41,284	39,924	39,164	42,071
Passing Rate	77.14	76.38	75.29	81.68
Geometry				
# Tests	31,748	31,630	32,605	31,612
Passing Rate	92.92	91.78	91.36	92.77
World Geography				
# Tests	9,853	11,772	12,744	12,800
Passing Rate	83.35	79.34	79.89	77.67
World History II				
# Tests	12,625	11,688	11,751	6,323
Passing Rate	87.58	88.12	86.21	75.53
Algebra II				
# Tests	12,206	12,587	13,457	12,709
Passing Rate	98.39	98.32	98.31	98.02
All (including other tests)				
# Tests	270,971	267,542	269,872	257,186
Passing Rate	85.18	84.53	83.72	84.37

Note. It was very uncommon for ninth grade students to take an SOL in reading or writing in these years (less than 1,000 tests in each year), so we do not list those SOLs separately in this table.

Figure 1A. SOL Pass Rates by Race

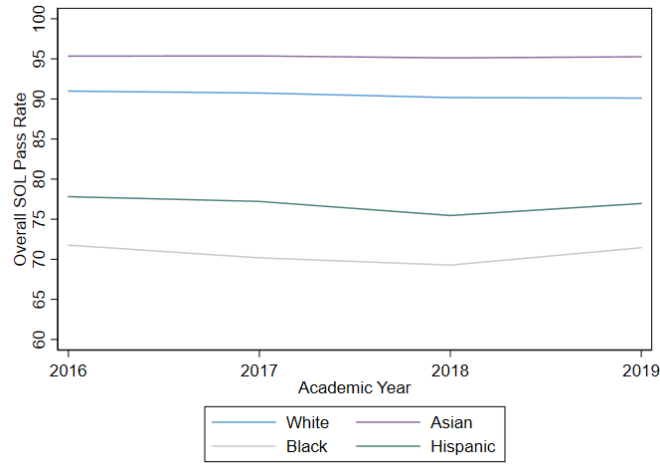


Figure 2A. SOL Pass Rates by FRPL

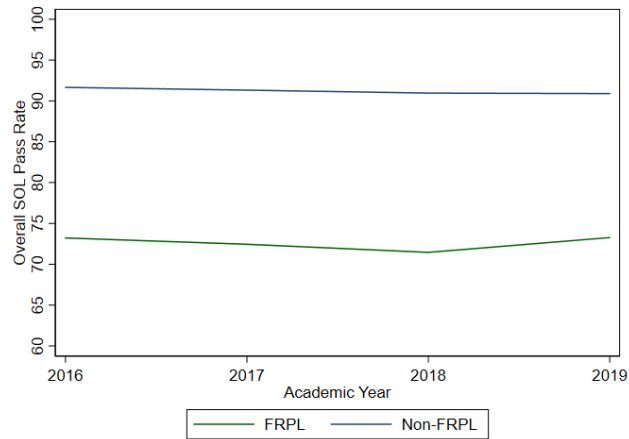


Figure 3A. SOL Pass Rates by Urbanicity

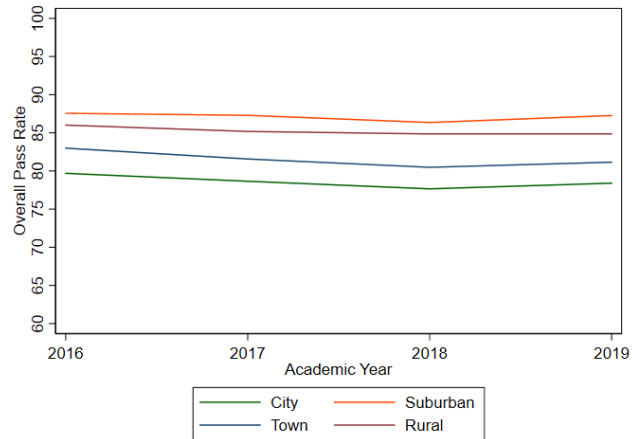


Figure 4A. Algebra I SOL Pass Rates by Race

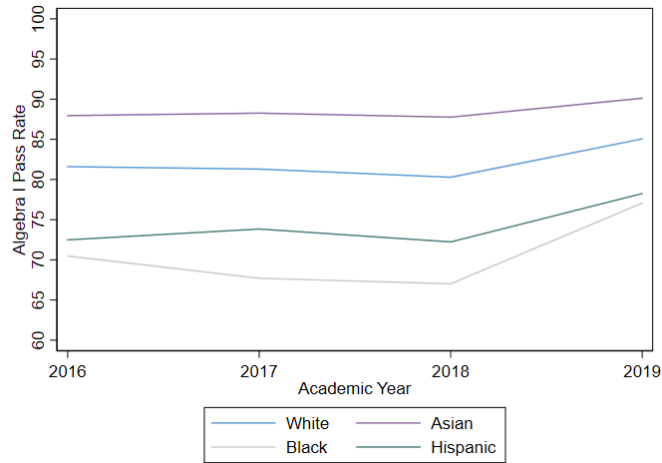


Figure 5A. Geometry SOL Pass Rates by Race

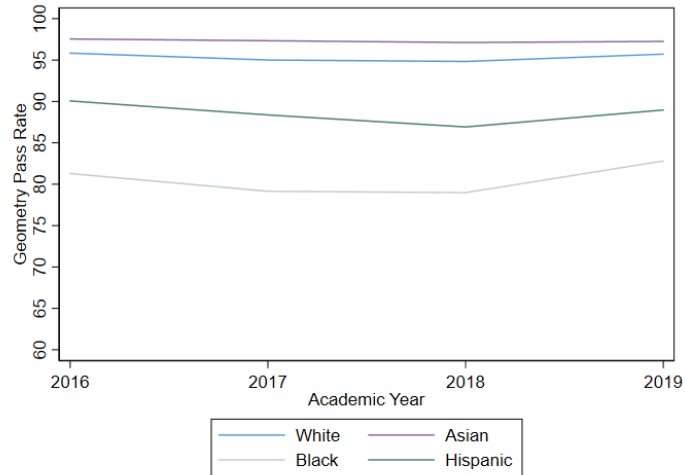


Figure 6A. Algebra II SOL Pass Rates by Race

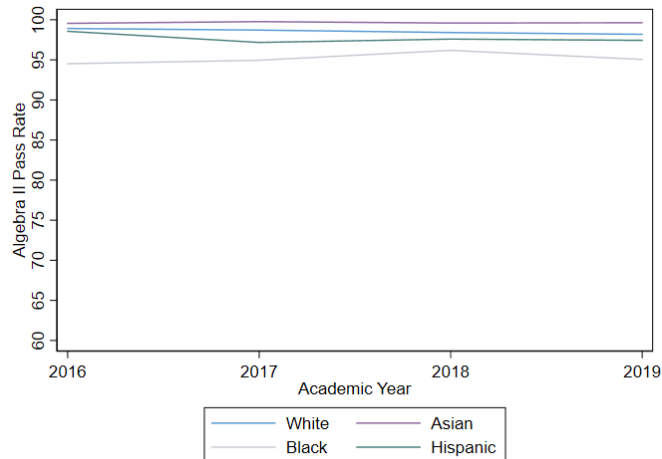


Figure 7A. Earth Science SOL Pass Rates by Race

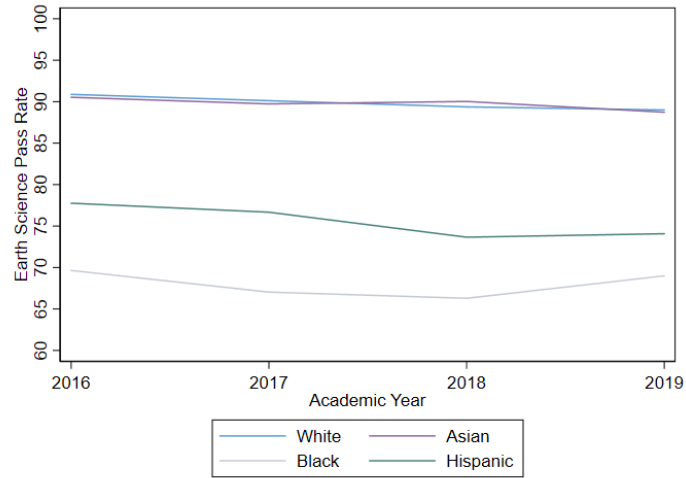


Figure 8A. Biology SOL Pass Rates by Race

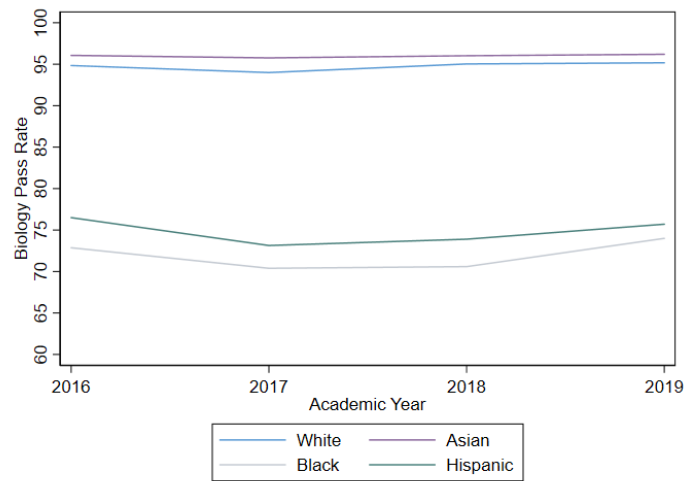


Figure 9A. World History I SOL Pass Rates by Race

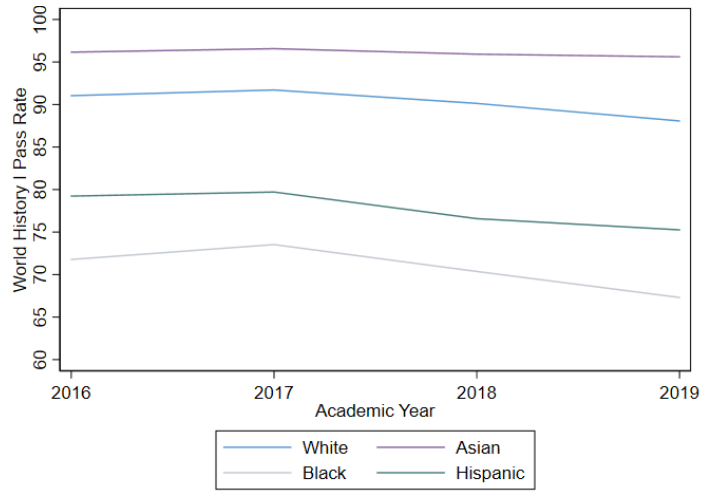


Figure 10A. World History II SOL Pass Rates by Race

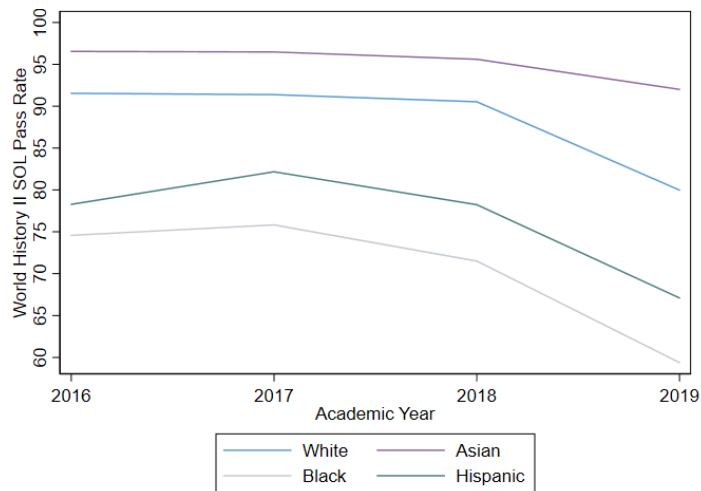


Figure 11A. World Geography SOL Pass Rates by Race

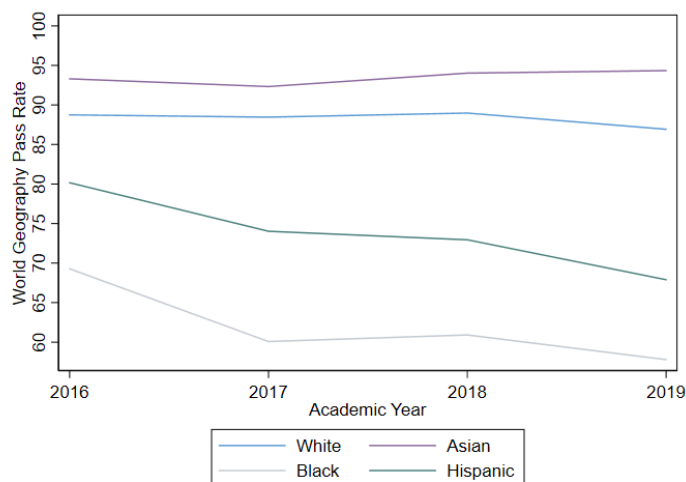


Figure 12A. Algebra I SOL Pass Rates by FRPL

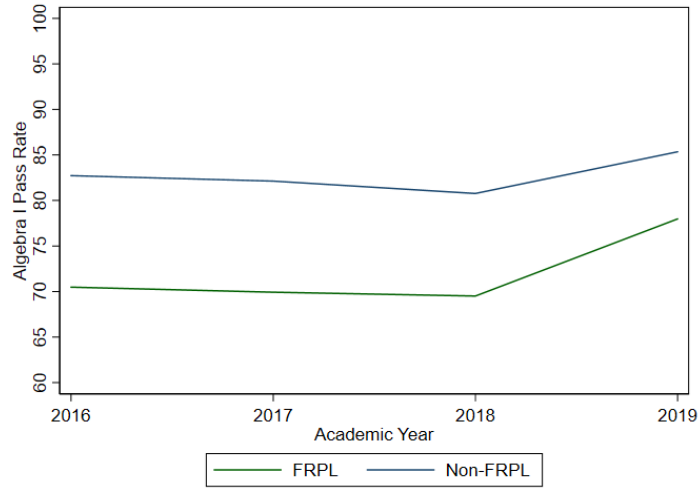


Figure 13A. Geometry SOL Pass Rates by FRPL

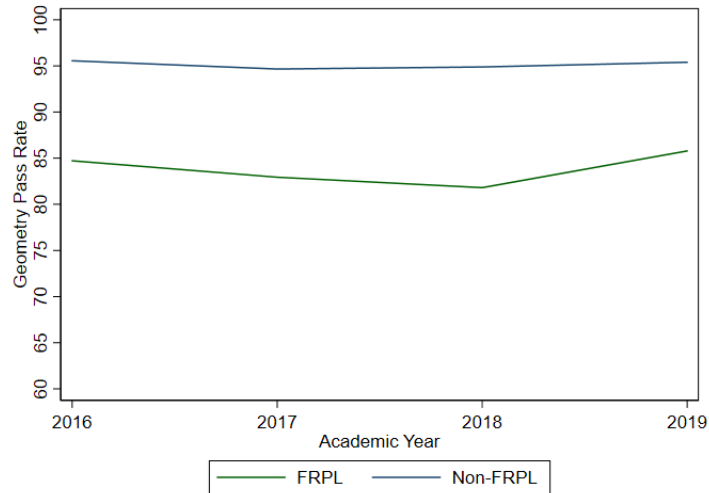


Figure 14A. Algebra II SOL Pass Rates by FRPL

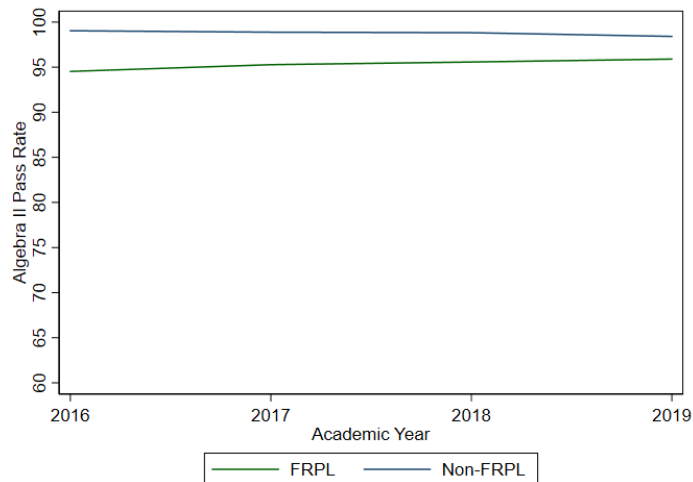


Figure 15A. Earth Science SOL Pass Rates by FRPL

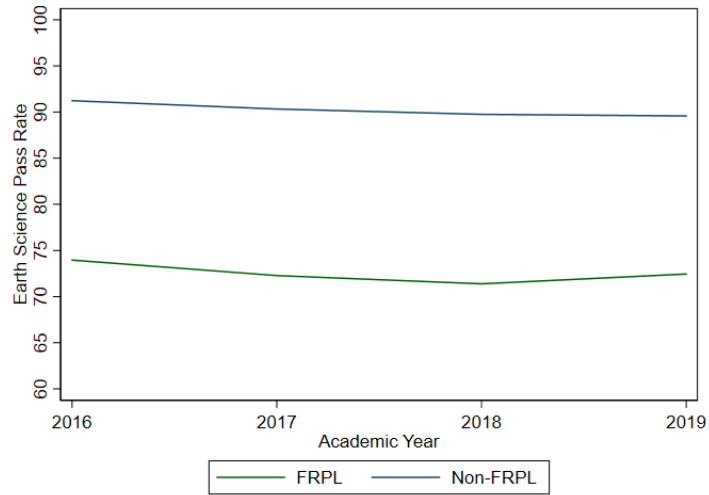


Figure 16A. Biology SOL Pass Rates by FRPL

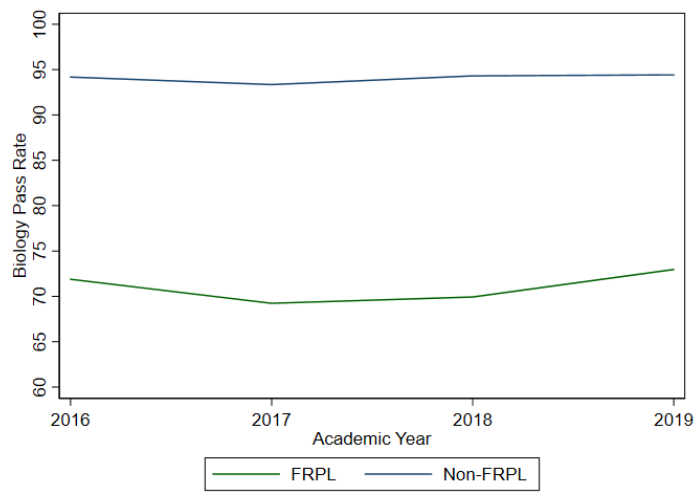


Figure 17A. World History I SOL Pass Rates by FRPL

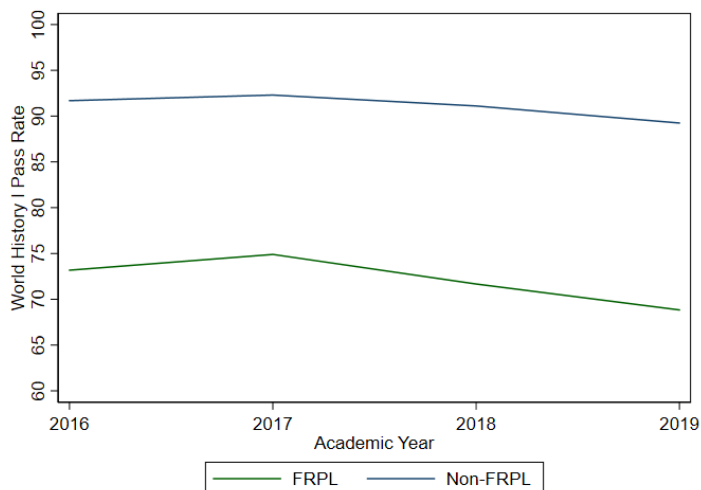


Figure 18A. World History II SOL Pass Rates by FRPL

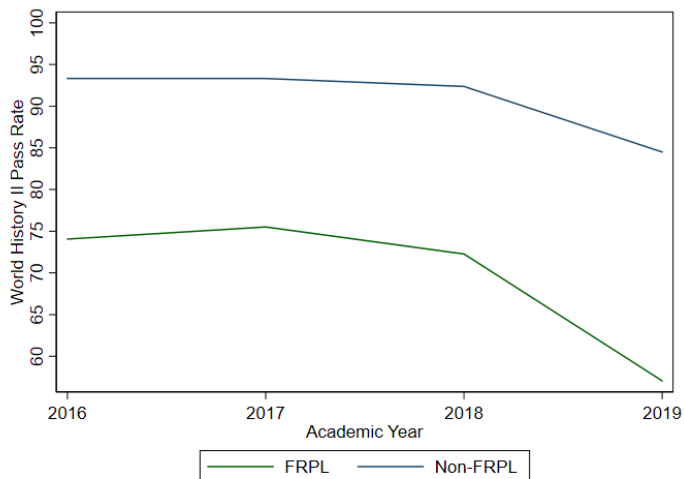


Figure 19A. World Geography SOL Pass Rates by FRPL

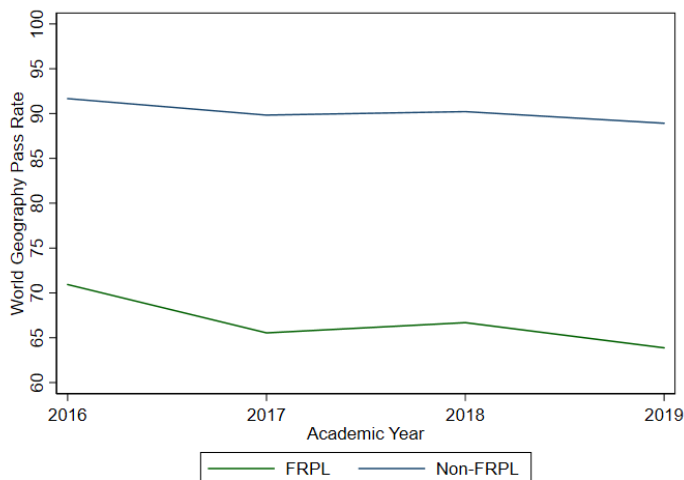


Figure 20A. Algebra I SOL Pass Rates by Urbanicity

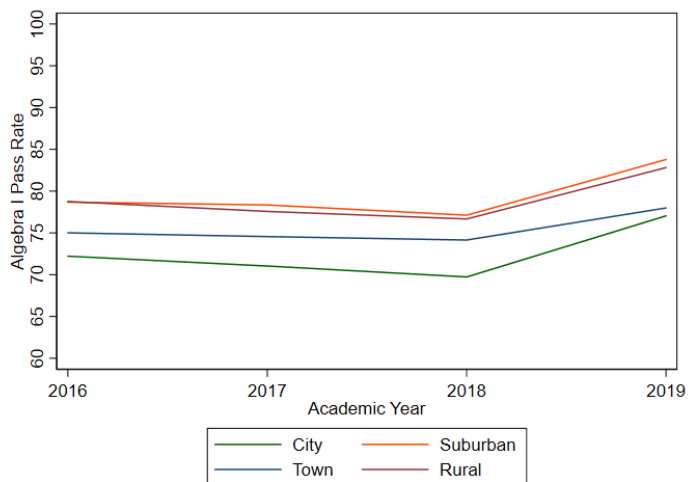


Figure 21A. Geometry SOL Pass Rates by Urbanicity

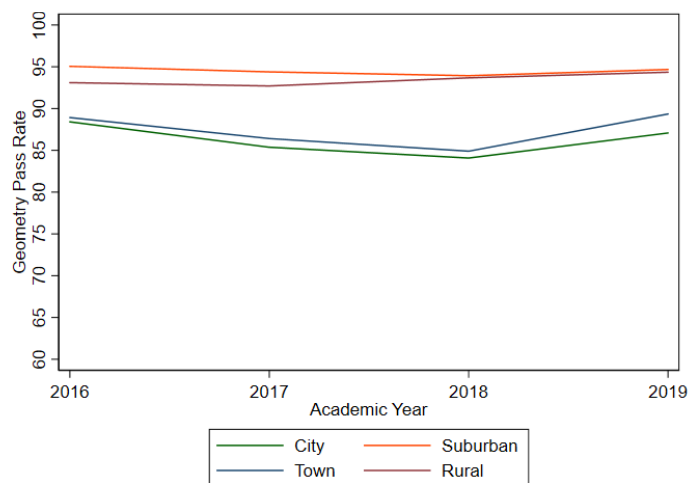


Figure 22A. Algebra II SOL Pass Rates by Urbanicity

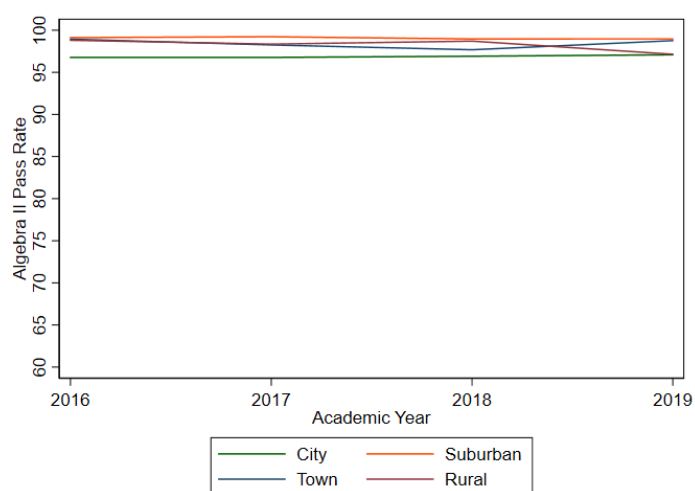


Figure 23A. Earth Science SOL Pass Rates by Urbanicity

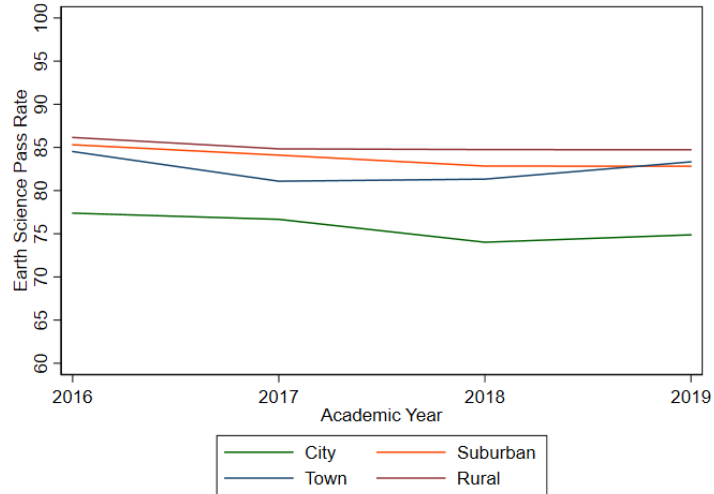


Figure 24A. Biology SOL Pass Rates by Urbanicity

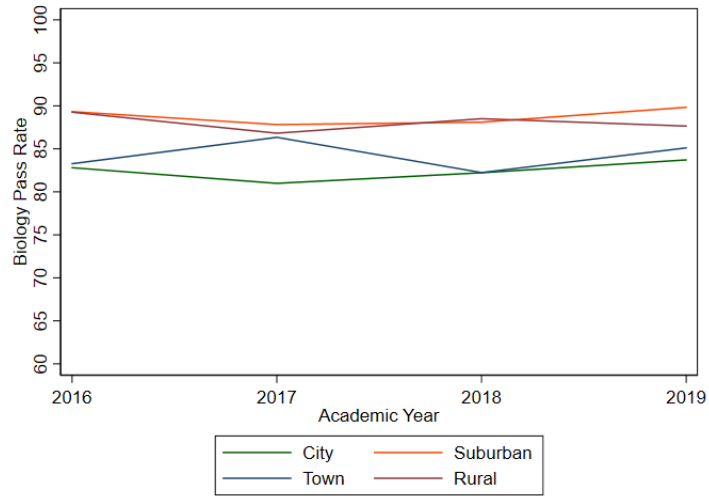


Figure 25A. World History I SOL Pass Rates by Urbanicity

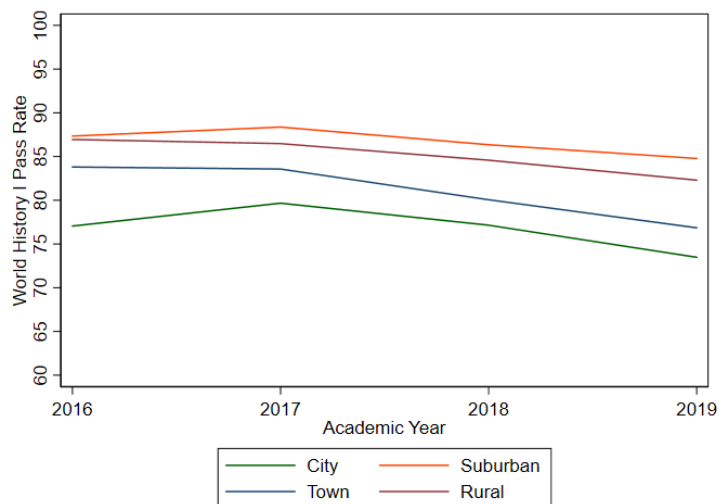


Figure 26A. World History II SOL Pass Rates by Urbanicity

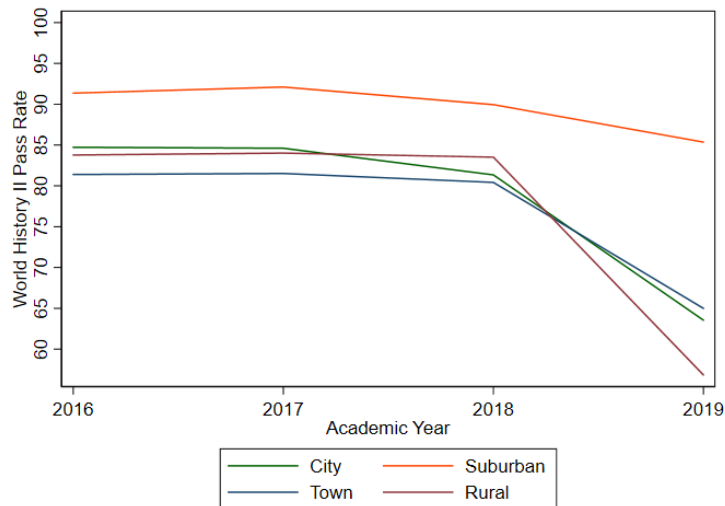


Figure 27A. World Geography SOL Pass Rates by Urbanicity

