

## Student Outcomes in Idaho School Districts with a Four-Day Week

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A little over one-third of Idaho's school districts currently operate with a four-day week schedule.<sup>2</sup> In this paper, I examine if districts with four-day weeks differ from districts with five-day weeks in terms of enrollment, rural locale status, student demographics, and wealth (as measured by market value of taxable property in the district). I then use econometric models to analyze differences in student test scores for schools with a four-day week versus schools with a five-day week.

Not surprisingly, I find that districts with four-day weeks are more likely to be small in terms of enrollment and more likely to be located in rural locales than districts with five-day weeks. There are regional differences in terms of the prevalence of four-day districts. Rural districts with four-day weeks are least prevalent in Regions 1 and 2 and are most prevalent in Regions 3, 4, and 5. I find that there are not any statistically significant differences in any region<sup>3</sup> between rural traditional districts that adopt a four-day school week and those that do not in terms of student demographics or wealth.

Additionally, I examined student outcomes in four-day schools versus five-day schools. I find that rural schools in traditional districts with a four-day week have a significantly higher share of students scoring "Below Standard"<sup>4</sup> on both the English Language Arts (ELA) and the Math ISAT than otherwise similar schools with a five-day week. This result is statistically significant. However, it is important to understand that these findings should not be interpreted as evidence that adoption of a four-day week leads to lower test scores.

I was unable to directly assess the question "Does adoption of a four-day school negatively affect student performance?" because I have limited data. In order to address this question, I would need a measure of student performance that was consistent between districts and that existed both before and after districts adopted the four-day school week. The measure I use in this analysis, ISAT test scores, has only recently been adopted (academic year 2014-2015) while districts started adopting four-day school weeks in academic year 1999-2000. Only 3 of the 55 districts that currently have a four-day week adopted it after academic year 2014-2015. Therefore, there are very few districts for which I could examine performance both before and after the district's adoption of the four-day school week.

With the available data, I could only answer "Do student outcomes differ between four-day and five-day schools?" Districts that choose to adopt a four-day week may be inherently different than districts that do not adopt a four-day week and these differences may affect student outcomes. I can address some of these differences in the analysis. I hold constant some student demographic information

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<sup>2</sup> For an excellent overview, see the Idaho Education News series on four-day schools  
<https://www.idahoednews.org/featured-series/rescheduled-education-a-five-day-series-on-four-day-schools/>.

<sup>3</sup> I exclude Region 1 from this discussion as there is only one rural four-day district.

<sup>4</sup> "Below Standard" is defined in this paper as scoring either "Below Basic" or "Basic".

(race/ethnicity and free or reduced-price lunch status) and I only include rural schools in traditional districts in the analysis. But it is not inconceivable that some unmeasured characteristic of the district that led it to implement the four-day week is also correlated with student performance. My analysis would attribute the effects of these unmeasured attributes to being an effect of the four-day week.

With that caveat in mind, I did find statistically significant negative impacts in math and ELA performance for four-day schools. I estimate that schools with a four-day week had an approximately 7 percentage point increase in the share of students scoring “Below Standard” on the Math ISAT for grades 5/6/7/8 than otherwise similar schools with a five-day week. I did not find any statistically significant effect for grades 3/4 or grade 10. I also examined whether a four day week had an effect on the share of students scoring “Below Standard” on the ELA ISAT. I estimate that schools with a four-day week had an approximately 6 percentage point increase in the share of students scoring “Below Standard” on the ELA ISAT for grades 5/6/7/8 than otherwise similar schools with a five-day week. I did not find a statistically significant effect for grades 3/4 or grade 10.

The rest of the paper is structured as follows. First, I show the prevalence of four-day school weeks in Idaho. Then, I examine how districts with a four-day week differ from districts with a five-day week. Finally, I show results from my estimation of the difference in student outcomes between four-day and five-day schools.

## Prevalence of four-day school weeks in Idaho

As of the 2016-2017 school year, there were 44 regular school districts, 9 charter schools<sup>5</sup>, and 2 regional school district that utilized a four-day week.<sup>6</sup> While 38 percent of traditional districts utilized a four-day school week, only 10 percent (approximately 28,000 students<sup>7</sup>) attended districts that utilized a four-day week (see Table 1). The difference in the share of *students* who attend a district with a four-day week and the share of *districts* with four-day weeks underscores the fact that these districts tend to be small in terms of student population.

Table 1: Prevalence of districts with four-day school weeks by type of district, 2016-2017 school year

	Number of districts				Total Enrollment			
	With a four-day week		With a five-day week		With a four-day week		With a five-day week	
All Districts	55	35%	102	65%	28,389	10%	264,893	90%
Charter Schools								
PCSC <sup>8</sup> -authorized	8	29%	20	71%	3,132	27%	8,658	73%
District-authorized	1	8%	11	92%	116	3%	3,727	97%
Regional Schools	2	100%	0	0%	314	100%	0	0%
Traditional districts	44	38%	71	62%	24,827	9%	252,508	91%

Notes: All Districts counts district-authorized charter schools as an independent district. All Districts does not include virtual or statewide districts (such as virtual charter schools). Enrollment in traditional districts does not include the enrollment in district-authorized charters.

Southeastern Idaho Technical Charter School is a district-authorized charter school but serves students from Malad, Preston, and West Side districts and thus, is counted as a Regional School and not as a district-authorized charter school.

Council School District utilized a four-day week for its elementary and junior/senior high school between 2012-13 and 2013-14. It then switched its elementary school to a five-day week between 2014-2015 and 2015-2016 and then switched its elementary school back to a four-day week in 2016-2017.

To further understand the relationship between district size and adoption of a four-day week, I split traditional school districts into five groups (quintiles) based on the district's enrollment. Districts in the 1<sup>st</sup> quintile have the lowest enrollment while those in the 5<sup>th</sup> quintile have the largest enrollment.

As can be seen, most of the smallest school districts (with enrollment of less than 214) utilize a four-day school week. However, 35 percent of districts with enrollment between 1,146 and 3,536 also utilize the four-day school week. None of the largest districts utilize a four-day school week. Thus, while a four-day school week is most common in the smallest school districts, it is not uncommon in relatively large districts.

<sup>5</sup> Two of the charter schools (Upper Carmen Public Charter School and SEI Tec Charter School) were authorized by the local school district which also followed a 4-day school week. The other charter schools were authorized by the Public School Charter Commission.

<sup>6</sup> One charter school, Alturas International Academy Charter, started in the 2016-2017 school year and utilizes a four-day week. With that exception, the schools using four-day weeks in 2015-2016 are the same as those scheduled to use a four-day week in 2016-2017.

<sup>7</sup> The number of students are measured using the districts' Average Daily Attendance (ADA).

<sup>8</sup> Public Charter School Commission

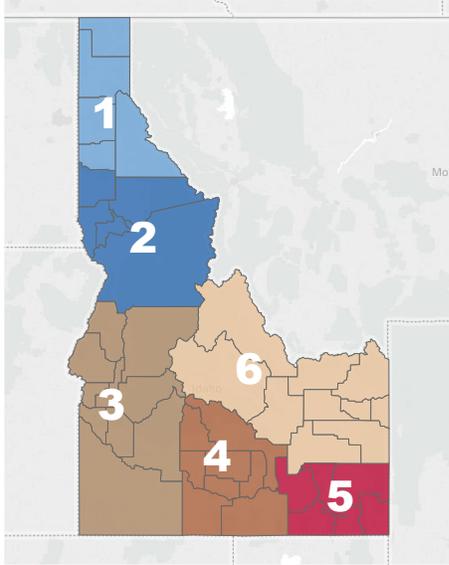
Table 2: Traditional districts by enrollment and four-day school week status

	Enrollment	Total districts	Districts with four-day week	Share of quintile with four-day week
1st Quintile	Less than 214	23	16	70%
2nd Quintile	Between 214 and 463	23	10	43%
3rd Quintile	Between 464 and 1,145	23	10	43%
4th Quintile	Between 1,146 and 3,536	23	8	35%
5th Quintile	More than 3,536	23	0	0%

The prevalence of the four-day school week varies between regions (see Figures 1 and 2). Regions 1 and 2 have the smallest share of districts that use a four-day week while Region 5 has the largest share. In terms of enrollment, Regions 1, 3, and 6 have the smallest share of students in schools with a four-day week while Region 5 has the largest share. Region 5 is an outlier in terms of both the share of districts that have adopted a four-day week as well as the share of students attending a district with a four-day week. Almost two-thirds of traditional districts in Region 5 have adopted a four-day week while more than one-third of all students attend such a district.

Region 2 has relatively few districts with a four-day week but relatively more students enrolled in a district with a four-day week while the converse is true for Regions 3 and 6. This suggests that smaller districts in Regions 3 and 6 have adopted a four-day week while larger districts in Region 2 have adopted a four-day week.

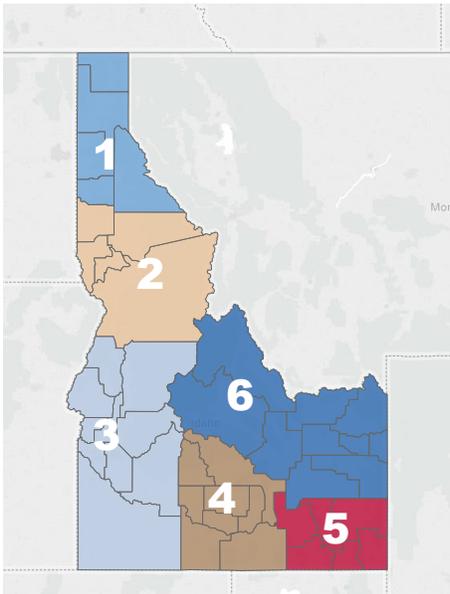
Figure 1: Prevalence of traditional districts with four-day week by region



	Number of districts			
	With a four-day week		With a five-day week	
Traditional districts	44	38%	71	62%
Region 1	2	15%	11	85%
Region 2	4	25%	12	75%
Region 3	12	39%	19	61%
Region 4	10	45%	12	55%
Region 5	9	64%	5	36%
Region 6	7	37%	12	63%

The regions are grouped by the share of districts that have a four-day week. Regions 1 and 2 (shown in blue) are below 30 percent while Regions 3, 4, and 6 (shown in brown) are between 30 and 50 percent. Region 5 (shown in red) is above 50 percent.

Figure 2: Enrollment in traditional districts by four-day week status and region



	Total Enrollment			
	With a four-day week		With a five-day week	
Traditional districts	24,827	9%	252,508	91%
Region 1	1,450	5%	28,821	95%
Region 2	1,504	12%	11,384	88%
Region 3	4,535	4%	118,165	96%
Region 4	5,057	14%	32,131	86%
Region 5	9,469	38%	15,338	62%
Region 6	2,812	6%	46,669	94%

The regions are grouped by the share of students that attend a district with a four-day week. Regions 1, 3, and 6 (shown in blue) are below 10 percent while Regions 2 and 4 (shown in brown) are between 10 and 20 percent. Region 5 (shown in red) is above 20 percent.

### Are districts with four-day weeks different from districts with five-day weeks?

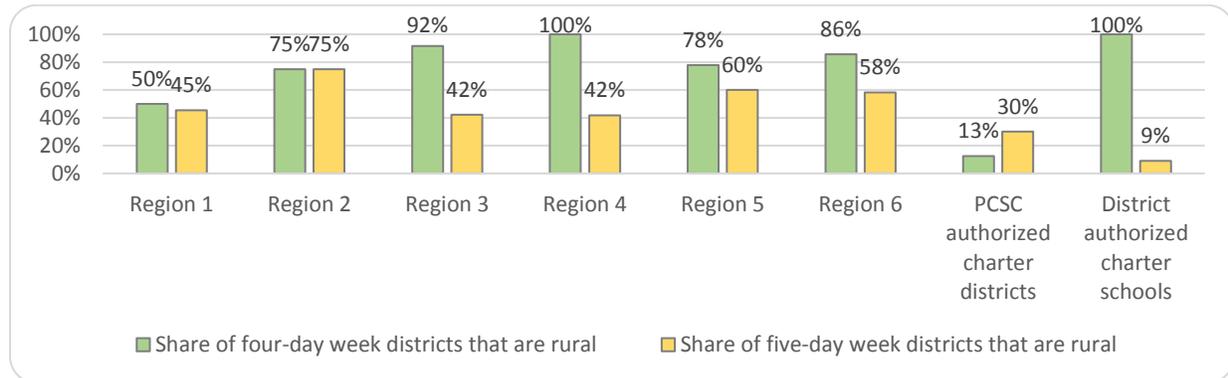
In this section, I examine if districts with four-day weeks differ from districts with five-day weeks in terms of rural locale, the share of students who are eligible to receive free or reduced-price lunch (FRPL), the share of minority students, and the market value of taxable property within the district. I compare districts by region and focus only on traditional rural districts for the last three measures (FRPL students, minority students, and market value of taxable property). Because I control for locale for the last three measures, I have to exclude comparisons with Region 1 as Region 1 only has one rural traditional four-day week district.

I find that districts with four-day weeks are more likely to be rural than districts with five-day weeks in most, but not all, regions. Furthermore, I find that, in most regions, rural traditional districts with a four-day week have a higher share of students who are FRPL-eligible and a lower share of students who are minorities than rural traditional districts with a five-day week. However, these differences are not statistically significant. Finally, I find that there are not statistically significant differences in the market value of taxable property between districts with four-day weeks and districts with five-day weeks.

#### *Differences in rural locale*

Statewide, 75 percent of traditional and charter districts with a four-day school week are rural<sup>9</sup> while only 43 percent of traditional and charter districts with a five-day school week are rural. There are regional differences (see Figure 3). Four-day districts are no more likely to be rural than five-day districts in Regions 1 and 2. Furthermore, PCSC-authorized charter schools that operate on a four-day schedule are actually less likely to be rural than those that operate on a five-day schedule. However, all other regions and district-authorized charter schools show the same pattern: districts/schools with four-day weeks are more likely to be rural than those with five-day weeks. The differences for Regions 3 and 4 are statistically significant.<sup>10</sup> This does not mean that four-day districts are strictly a rural phenomenon. Statewide, 18 percent of non-rural traditional and charter districts operate on a four-day week.

Figure 3: Rural locale by region and four-day week status



Note: Regional districts are not included in this comparison as no regional district operates with a five-day week.

<sup>9</sup> I use the National Center for Education Statistics locale definitions to define rural.

<sup>10</sup> The differences for Regions 3 and 4 are statistically significant at the 0.01 level. The differences for the other regions are not statistically significant at the 0.10 level.

### Differences in student demographics

I examine how districts with four-day weeks differ from those with five-day weeks in terms of the share of students who are FRPL-eligible and the share of students who are minorities (see Figures 4 and 5). Because the vast majority of district with four-day weeks are rural, I only include rural traditional districts in these comparisons.

Figure 4 shows the average share of FRPL students for four-day week districts versus five-day week districts in each region. None of the differences between districts with a four-day week and districts with a five-day week are statistically significant. However, in most regions, traditional rural districts with a four-day week have a larger share of students eligible for FRPL than traditional rural districts with a five-day week. The only exception is Region 5.

Figure 5 compares the share of students who are minorities for four-day week districts versus five-day week districts in each region. Rural traditional districts with a four-day week have a smaller share of minority students than rural traditional districts with a five-day week in most regions but the differences are not statistically significant.

Figure 4: Average share of students eligible for free or reduced-price lunch in rural traditional districts, by region and length of school week

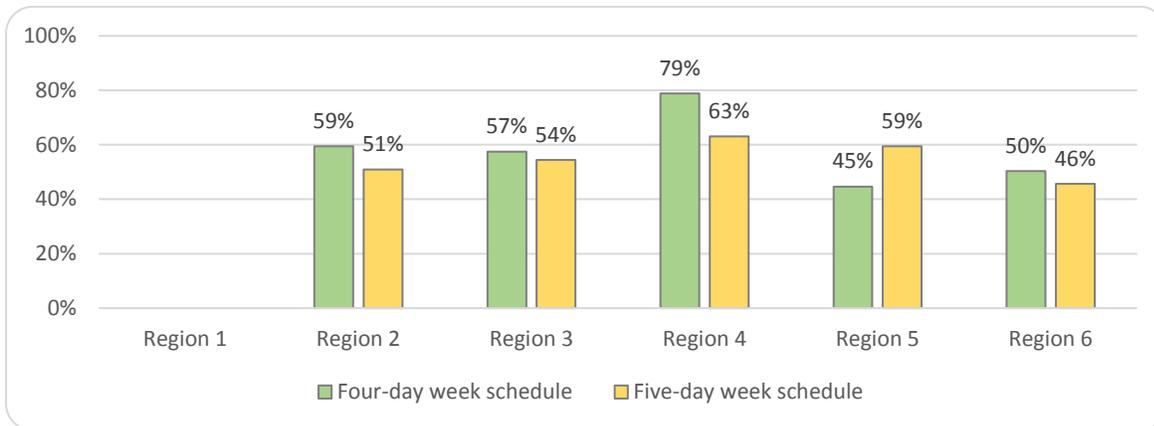
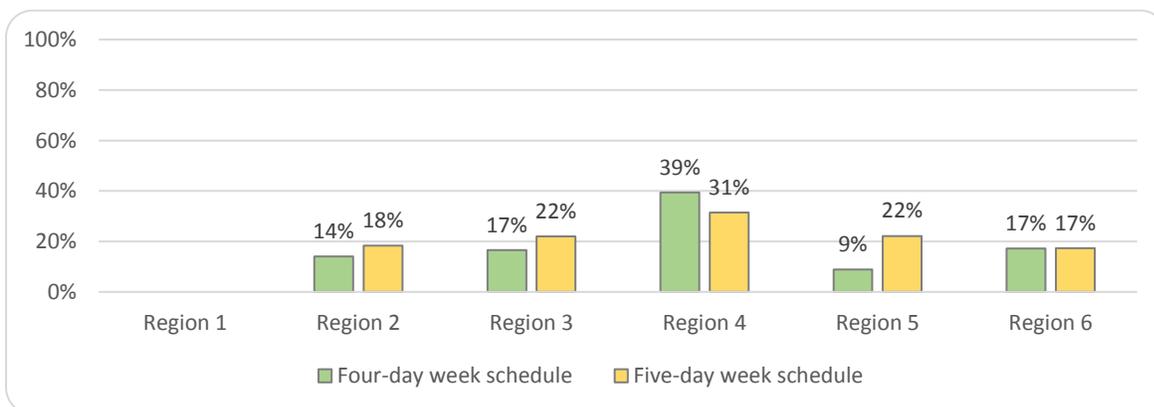


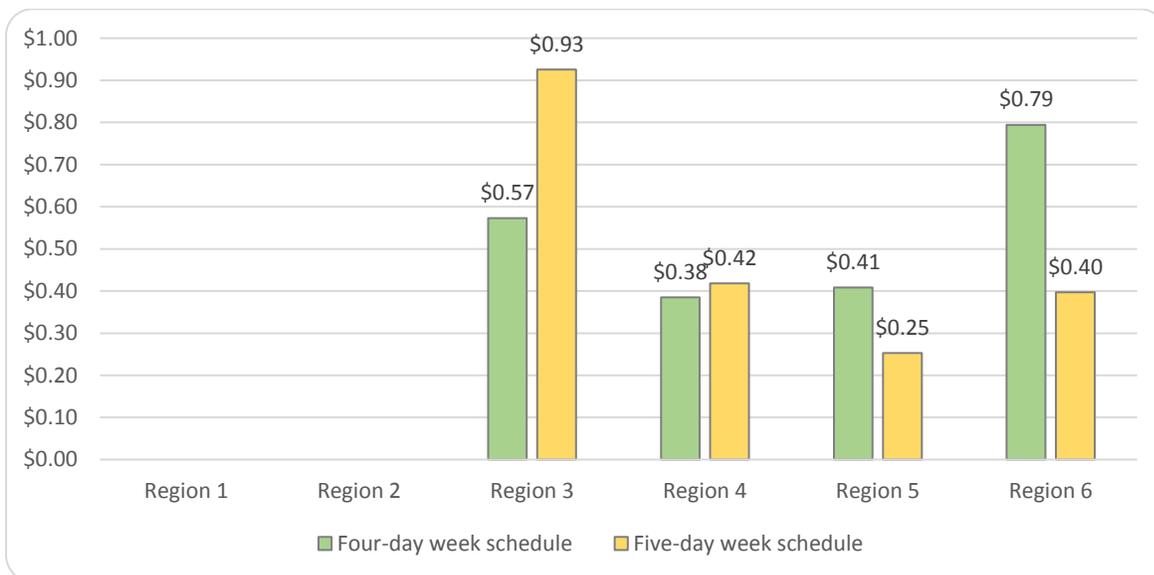
Figure 5: Average share of students who are minorities in rural traditional districts, by region and length of school week



### *Differences in market value of taxable property*

Districts may adopt a four-day week in an effort to save money. In that case, there may exist differences in the financial resources of districts who choose to adopt a four-day week versus those districts that choose not to adopt a four-day week. In order to compare the financial resources of districts with a four-day week to districts with a five-day week, I compare the average of the market value of the taxable property in each region (see Figure 6). I norm this by the Average Daily Attendance (ADA) in each district. As in Figures 4 and 5, I only include rural traditional districts in this comparison. It should be noted that there are shortcomings to this approach. Very small districts may have a high market value of property per ADA due to a very low ADA. These districts may still struggle with paying for the fixed costs of maintaining a district. To control for this, I only include districts with an ADA of at least 200 in this part of the analysis.

Figure 6: Average market value of taxable property per ADA in rural traditional districts, by region and length of school week (millions of dollars)



Note: I only include rural traditional schools with an ADA of at least 200. I could not include Region 2 in this comparison as there are no four-day week districts in Region 2 with an ADA of at least 200.

The difference in average market value between districts with four-day weeks and districts with five-day weeks is not statistically significant in any region. While districts with four day schedules have lower market value of taxable property per ADA in Region 3, the relationship is reversed in Region 6.

Do students who attend a four-day school have different outcomes than students who attend a five-day school?

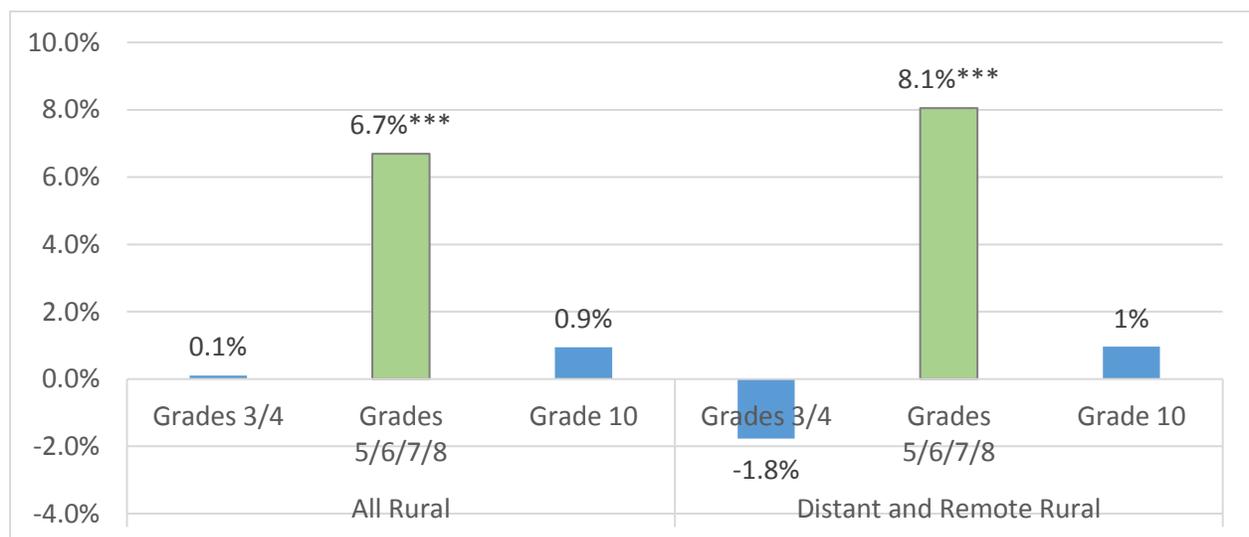
In this section, I compare outcomes for four-day schools versus five-day schools. I examine school level outcomes for schools found in traditional districts that are defined as rural using the NCES locale categories (see Appendix I for a definition of locales). I exclude elementary districts from this analysis as they are likely to be different in unmeasurable ways than districts that serve all grades. In practice, this meant I only excluded Swan Valley District which is found in Region 6. I focus on this subset of schools in order to minimize any differences between schools that may be correlated with the decision to adopt a four-day school week. The outcome of interest is the share of students in the school who score “Below Standard” on the Math ISAT and the ELA ISAT. I define “Below Standard” as scoring either “Below Basic” or “Basic”.

I use a multivariate regression model to estimate the share of students, by grade, in each school who score “Below Standard.” I initially pooled grades 3 and 4, grades 5 and 6, and grades 7, 8. However, the results for grades 5/6 and grades 7/8 were very similar so I combined these grades in my final specification.

I control for the year (2014-2015 and 2015-2016), the share of the school’s students that are FRPL-eligible, the share of the school’s students that are minority, the school grade, the district’s ADA, the market value of the taxable property within the district, and the region the school is located in. I cluster standard errors at the district level.

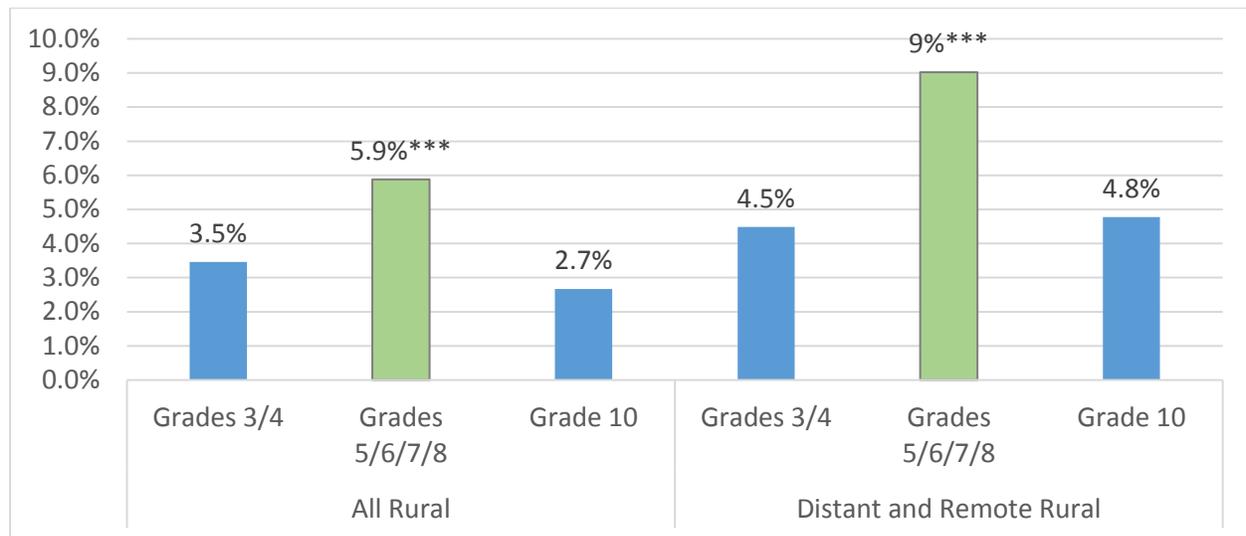
I find statistically significant differences between schools with a four-day week versus schools with a five-day week in both Math and ELA outcomes for grades 5/6 and grades 7/8. Figure 5 shows the estimated effect for the Math ISAT while Figure 6 shows the estimated effect for the ELA ISAT. I show results for two different definitions of rural. Both are based on NCES locale codes. All Rural includes districts classified as “Rural: Fringe”, “Rural: Distant”, and “Rural: Remote.” Distant and remote rural excludes “Rural: Fringe.”

Figure 4: Estimated effect of a four-day week on the share of students who score “Below Standard” on Math ISAT, traditional districts in rural locales



Note: Statistical significance is denoted by: \* p<0.10, \*\* p < 0.05, \*\*\* p < 0.01

Figure 5: Estimated effect of a four-day week on the share of students who score “Below Standard” on ELA ISAT, traditional districts in rural locales



Note: Statistical significance is denoted by: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

As can be seen in Figures 4 and 5, I found statistically significant effects for Grades 5/6 and Grades 7/8. The results are larger when I exclude “Rural: Fringe” schools.

A “Rural: Distant” or “Rural: Remote” school that uses a four-day week has an approximately 8 percentage point increase in the share of students who score “Below Standard” on the Math ISAT and an approximately 9 percentage point increase in the share of students who score “Below Standard” on the ELA ISAT in these Grades 5/6 and Grades 7/8, respectively, compared to an otherwise similar school that uses a five-day week.

As discussed above, this work should not be seen of evidence that a school who switches to a four-day week from a five-day week will see increases in the share of students who score “Below Standard” on the Math and ELA ISAT. Rather, this work is evidence that schools who utilize a four-day week have a higher share of students who score “Below Standard” on the Math and ELA ISAT than otherwise similar schools who utilize a five-day week.

Appendix I: Definitions of NCES Rural Locale Categories and Census Urban Locale Categories Used in Analysis

	Definition of NCES Rural Locale Codes <sup>11</sup>
Rural: Fringe	Census-defined rural territory that is less than or equal to 5 miles from an Urbanized Area, as well as rural territory that is less than or equal to 2.5 miles from an Urban Cluster. Includes: Buhl Joint District; Fremont County Joint District; Gooding Joint District; Jefferson County Joint District; Kellogg Joint District; Notus District; Snake River District; Wendell District
Rural: Distant	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an Urbanized Area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an Urban Cluster. Includes: Aberdeen District; Arbon Elementary District; Basin School District; Castleford District; Culdesac Joint District; Firth District; Genesee Joint District; Grace Joint District; Hagerman Joint District; Hansen District; Highland Joint District; Horseshoe Bend School District; Kendrick Joint District; Kootenai District; Lapwai District; Marsh Valley Joint District; Marsing Joint District; Melba Joint District; Mullan District; New Plymouth District; Parma District; Plummer-Worley Joint District; Ririe Joint District; Troy School District; West Bonner County District; West Side Joint District; Wilder District
Rural: Remote	Census-defined rural territory that is more than 25 miles from an Urbanized Area and also more than 10 miles from an Urban Cluster. Includes: Avery School District; Bear Lake County District; Bliss Joint District; Bruneau-Grand View Joint School District; Butte County Joint District; Camas County District; Cambridge Joint District; Cascade District; Challis Joint District; Clark County District; Cottonwood Joint District; Council District; Dietrich District; Garden Valley District; Glens Ferry Joint District; Kamiah Joint District; Mackay Joint District; Mccall-Donnelly Joint School District; Meadows Valley District; Midvale District; Murtaugh Joint District; Nezperce Joint District; North Gem District; Oneida County District; Pleasant Valley Elementary District; Potlatch District; Prairie Elementary District; Richfield District; Rockland District; Salmon River Joint School District; Shoshone Joint District; South Lemhi District; Swan Valley Elementary District; Teton County District; Three Creek Joint Elementary District; Valley District; West Jefferson District; Whitepine Joint School District

	Definition of Census Urban Area Locale Codes <sup>12</sup>
Urban Area	"Densely settled core of census tracts and/or census blocks that meet minimum population density requirements"
Urbanized Area	Urban areas "of 50,000 or more people" Includes: Boise City, ID; Coeur d'Alene, ID; Idaho Falls, ID; Lewiston, ID—WA; Nampa, ID; Pocatello, ID

<sup>11</sup> Definitions of rural locales are found at: [https://nces.ed.gov/programs/edge/docs/LOCALE\\_DEFINITIONS.pdf](https://nces.ed.gov/programs/edge/docs/LOCALE_DEFINITIONS.pdf)

<sup>12</sup> Definitions of urban locales are found at: <https://www.census.gov/geo/reference/ua/urban-rural-2010.html>

Urban Cluster	Urban areas "of at least 2,500 and less than 50,000 people" Includes: American Falls, ID; Blackfoot, ID; Bonners Ferry, ID; Buhl, ID; Burley, ID; Emmett, ID; Filer, ID; Gooding, ID; Grangeville, ID; Hailey, ID; Homedale, ID; Jerome, ID; Kellogg, ID; Ketchum, ID; Kuna, ID; Moscow, ID; Mountain Home, ID; Mountain Home AFB, ID; Newport, WA—ID; Ontario, OR—ID; Orofino, ID; Osburn, ID; Preston, ID; Rathdrum, ID; Rexburg, ID; Rigby, ID; Rupert, ID; St. Anthony, ID; St. Maries, ID; Salmon, ID; Sandpoint, ID; Shelley, ID; Soda Springs, ID; Star, ID; Twin Falls, ID; Weiser, ID—OR; Wendell, ID
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Figure 1-2: Share of students in rural traditional districts who are minorities by region and four-day week status

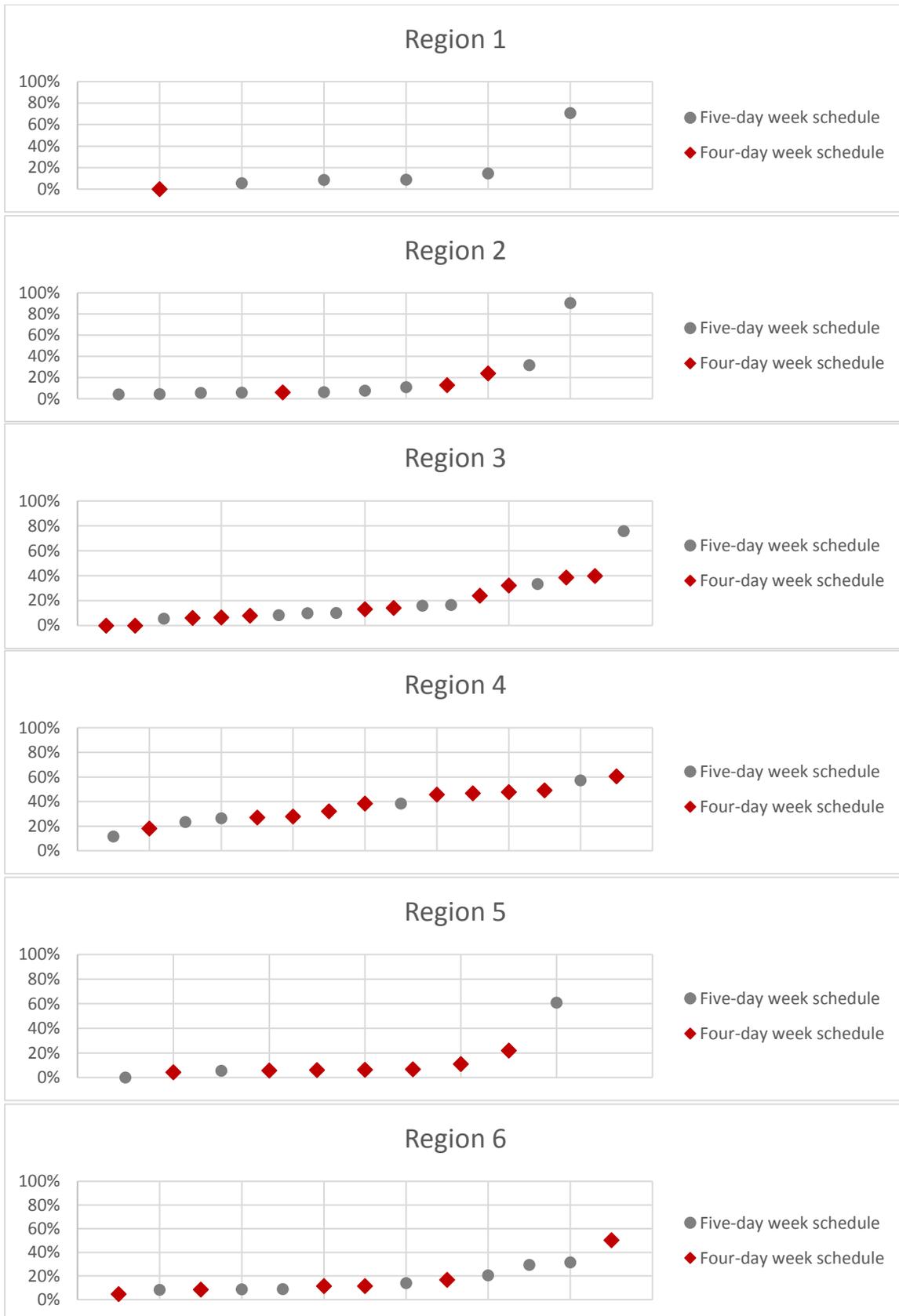
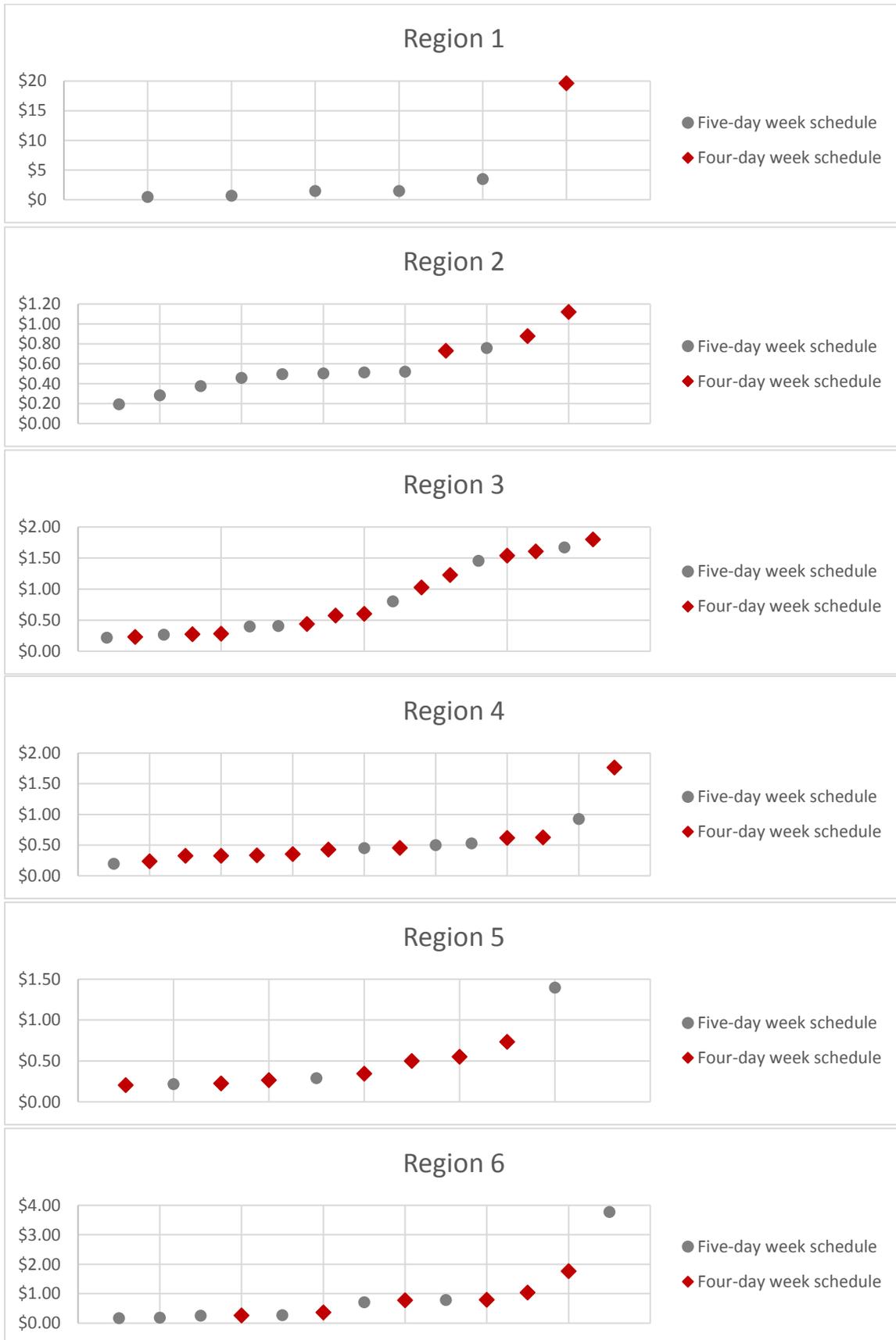


Figure 1-3: Market value per ADA in rural traditional districts by region and four-day week status



Appendix III: Schools used in multivariate analysis

Region 1 - Five Day Districts	
044	Plummer-Worley Joint District
083	West Bonner County District
274	Kootenai District
391	Kellogg Joint District
392	Mullan District
Region 2 - Five Day Districts	
242	Cottonwood Joint District
282	Genesee Joint District
283	Kendrick Joint District
285	Potlatch District
287	Troy School District
288	Whitepine Jt School District
302	Nezperce Joint District
304	Kamiah Joint District
341	Lapwai District
Region 2 - Four Day Districts	
243	Salmon River Joint School Dist
305	Highland Joint District
342	Culdesac Joint District
Region 3 - Five Day Districts	
011	Meadows Valley District
072	Basin School District
133	Wilder District
134	Middleton District
137	Parma District
372	New Plymouth District
421	Mccall-Donnelly Jt. School District
422	Cascade District
Region 3 - Four Day Districts	
013	Council District
073	Horseshoe Bend School District
135	Notus District
136	Melba Joint District
363	Marsing Joint District
365	Bruneau-Grand View Joint School District
432	Cambridge Joint District
Region 4 - Five Day and Four Day District	
233	Hagerman Joint District
Region 4 - Five Day Districts	
121	Camas County District
314	Dietrich District

412	Buhl Joint District
417	Castleford District
418	Murtaugh Joint District
Region 4 - Four Day Districts	
192	Glenns Ferry Joint District
231	Gooding Joint District
232	Wendell District
234	Bliss Joint District
262	Valley District
312	Shoshone Joint District
316	Richfield District
415	Hansen District
Region 5 - Five Day Districts	
058	Aberdeen District
202	West Side Joint District
Region 5 - Four Day Districts	
021	Marsh Valley Joint District
033	Bear Lake County District
052	Snake River District
148	Grace Joint District
149	North Gem District
351	Oneida County District
382	Rockland District
Region 6 - Five Day Districts	
215	Fremont County Joint District
251	Jefferson County Jt District
252	Ririe Joint District
253	West Jefferson District
321	Madison District
401	Teton County District
Region 6 - Four Day Districts	
059	Firth District
111	Butte County Joint District
161	Clark County District
181	Challis Joint District
182	Mackay Joint District
292	South Lemhi District

Appendix IV: Sensitivity analysis of multivariate analysis

Table 3-1: Sensitivity analysis results, grades 5/6 and grades 7/8

Share of students who score "Below Standard" on Math ISAT						
	Grades 5/6/7/8		Grades 5/6		Grades 7/8	
	Estimated coefficient	p-value	Estimated coefficient	p-value	Estimated coefficient	p-value
Baseline specification	0.067	0.006	0.073	0.010	0.058	0.057
Specification 1: Alternate definition of rural	0.081	0.003	0.077	0.031	0.078	0.017
Specification 2: Exclusion of regions						
Exclude Region 1	0.070	0.004	0.074	0.009	0.064	0.033
Exclude Region 2	0.058	0.034	0.050	0.104	0.067	0.045
Exclude Region 3	0.082	0.004	0.099	0.001	0.061	0.118
Exclude Region 4	0.066	0.016	0.085	0.011	0.033	0.405
Exclude Region 5	0.071	0.006	0.072	0.024	0.063	0.038
Exclude Region 6	0.067	0.025	0.067	0.088	0.063	0.051
Share of students who score "Below Standard" on ELA ISAT						
	Grades 5/6/7/8		Grades 5/6		Grades 7/8	
	Estimated coefficient	p-value	Estimated coefficient	p-value	Estimated coefficient	p-value
Baseline specification	0.059	0.009	0.063	0.026	0.055	0.069
Specification 1: Alternate definition of rural	0.090	0.002	0.091	0.016	0.088	0.012
Specification 2: Exclusion of regions						
Exclude Region 1	0.065	0.004	0.065	0.025	0.067	0.025
Exclude Region 2	0.044	0.072	0.044	0.160	0.049	0.140
Exclude Region 3	0.056	0.040	0.070	0.021	0.039	0.324
Exclude Region 4	0.072	0.014	0.074	0.037	0.072	0.068
Exclude Region 5	0.059	0.011	0.068	0.026	0.047	0.137
Exclude Region 6	0.073	0.004	0.082	0.028	0.064	0.045

Share of students who score "Below Standard" on Math ISAT						
	Grades 5/6/7/8		Grades 5/6		Grades 7/8	
	Estimated coefficient	p-value	Estimated coefficient	p-value	Estimated coefficient	p-value
Specification 1: Control for Region and school grade only						
Region 1	0.105	0.004	0.141	0.001	0.049	0.268
Region 2	-0.046	0.342	-0.050	0.373	-0.044	0.376
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	0.042	0.325	0.051	0.296	0.031	0.462
Region 5	-0.110	0.007	-0.106	0.014	-0.113	0.017
Region 6	-0.031	0.422	0.001	0.981	-0.072	0.145
Specification 2: Control for Region, school grade, and four-day school week status						
Four-day week	0.073	0.013	0.069	0.043	0.077	0.012
Region 1	0.136	0.001	0.167	0.000	0.086	0.081
Region 2	-0.031	0.494	-0.039	0.462	-0.025	0.606
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	0.028	0.465	0.036	0.448	0.02	0.592
Region 5	-0.139	0.001	-0.137	0.005	-0.138	0.004
Region 6	-0.024	0.528	0.004	0.925	-0.06	0.233
Specification 3: Control for Region, school grade, four-day school week and share minority and share low income						
Four-day week	0.074	0.001	0.070	0.014	0.078	0.005
Region 1	0.151	0.000	0.182	0.000	0.103	0.028
Region 2	-0.012	0.713	-0.019	0.651	-0.007	0.835
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.022	0.503	-0.014	0.736	-0.031	0.351
Region 5	-0.108	0.000	-0.101	0.003	-0.112	0.002
Region 6	-0.006	0.858	0.022	0.532	-0.042	0.368
Specification 4: Baseline specification – control for region, school grade, four-day school week, share minority, share low income, market value of taxable property, and average daily attendance						
Four-day week	0.067	0.006	0.073	0.010	0.058	0.057
Region 1	0.141	0.000	0.178	0.000	0.078	0.067
Region 2	0.008	0.839	-0.004	0.931	0.018	0.618
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.013	0.676	-0.005	0.904	-0.024	0.441
Region 5	-0.089	0.016	-0.113	0.008	-0.055	0.206
Region 6	0.007	0.865	0.014	0.750	-0.002	0.962
Specification 5: Baseline specification (see Specification 4) but excluding Regions 1 and 5						
Four-day week	0.074	0.003	0.071	0.024	0.07	0.02
Region 1						
Region 2	0.020	0.621	0.006	0.916	0.032	0.415
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.02	0.493	-0.015	0.679	-0.028	0.356
Region 5						
Region 6	0.013	0.752	0.021	0.655	0.003	0.956

Share of students who score "Below Standard" on ELA ISAT						
	Grades 5/6/7/8		Grades 5/6		Grades 7/8	
	Estimated coefficient	p-value	Estimated coefficient	p-value	Estimated coefficient	p-value
Specification 1: Control for Region and school grade only						
Region 1	0.012	0.811	0.067	0.192	-0.073	0.290
Region 2	-0.028	0.573	-0.017	0.753	-0.042	0.424
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	0.007	0.880	0.021	0.685	-0.009	0.859
Region 5	-0.096	0.047	-0.073	0.132	-0.124	0.031
Region 6	-0.034	0.483	-0.018	0.704	-0.051	0.414
Specification 2: Control for Region, school grade, and four-day school week status						
Four-day week	0.047	0.190	0.055	0.132	0.036	0.390
Region 1	0.032	0.536	0.088	0.083	-0.056	0.439
Region 2	-0.019	0.698	-0.008	0.873	-0.033	0.532
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.002	0.971	0.008	0.863	-0.014	0.772
Region 5	-0.115	0.027	-0.099	0.067	-0.136	0.024
Region 6	-0.030	0.545	-0.016	0.732	-0.046	0.483
Specification 3: Control for Region, school grade, four-day school week and share minority and share low income						
Four-day week	0.041	0.129	0.051	0.094	0.028	0.416
Region 1	0.044	0.179	0.099	0.004	-0.038	0.504
Region 2	0.004	0.914	0.014	0.744	-0.011	0.782
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.061	0.105	-0.045	0.285	-0.080	0.062
Region 5	-0.075	0.040	-0.057	0.158	-0.099	0.030
Region 6	-0.006	0.899	0.006	0.879	-0.020	0.751
Specification 4: Baseline specification – control for region, school grade, four-day school week, share minority, share low income, market value of taxable property, and average daily attendance						
Four-day week	0.059	0.009	0.063	0.026	0.055	0.069
Region 1	0.048	0.234	0.108	0.011	-0.044	0.534
Region 2	0.058	0.181	0.051	0.313	0.064	0.141
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.040	0.226	-0.030	0.442	-0.052	0.148
Region 5	-0.073	0.094	-0.062	0.182	-0.086	0.092
Region 6	-0.005	0.930	0.004	0.930	-0.011	0.883
Specification 5: Baseline specification (see Specification 4) but excluding Regions 1 and 5						
Four-day week	0.066	0.005	0.070	0.026	0.061	0.060
Region 1						
Region 2	0.063	0.226	0.051	0.390	0.073	0.145
Region 3	Comparison region		Comparison region		Comparison region	
Region 4	-0.041	0.216	-0.034	0.370	-0.050	0.182
Region 5						
Region 6	-0.002	0.968	0.009	0.866	-0.013	0.871