This is a version of a working paper for my proposed dissertation, modified to present a technical summary for a general policy audience. The results shown here are likely to change in future revisions, but it nevertheless provides a good example of policy-oriented writing.

Student Transferring and Outcomes under the Texas Public Education Grant[1]

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1 Introduction

The Public Education Grant (PEG) program is a long-term initiative in Texas that encourages students from low-performing schools to transfer to higher-performing schools. It has been running over 25 years, and in our sample an average of 9.3% of students were eligible to take advantage of the program each year. Despite this, there has been little academic research evaluating the effects of the PEG program on students. To our knowledge, our work is the first to identify causal effects of the PEG program using a regression discontinuity design.

We find evidence of substantial effects on long-term outcomes. Elementary school students whose schools are placed on the PEG list become more likely to graduate high school, attend a four-year university in Texas, and pursue a degree in STEM at one of those universities. Surprisingly, however, there is little evidence that student transferring is contributing to this effect.[2] An alternative channel which could explain the long-term benefits of the PEG program is that PEG list placement encourages schools to provide their students with higher-quality education. In support of this hypothesis, we find evidence that schools placed on the PEG list have lower failing rates on state standardized tests in the following year.

2 Institutional Background

The PEG program was started in 1995, and has continued until present day. It encourages students at low-performing schools to transfer school districts by providing the receiving district with an extra 10% of the funding that they would normally receive for the transferring student. The schools that students transfer to cannot be on the PEG list themselves, which helps to ensure that students are transferring to "higher-performing" schools. Other districts are not required to accept PEG transfers, but there are a number of student characteristics which cannot be used by the district in making their acceptance decisions. These include things like academic achievement and socioeconomic status, preventing districts from selectively accepting PEG-funded transfers in an effort to obtain more "academically gifted" students. Students who are accepted do not need to pay tuition at the receiving school, but may face additional transportation costs because the receiving district is not required to provide them with transportation to their new school (31 TEX. EDUC. CODE § 29.201-205).

The general timing of the PEG program is as follows. Each year schools can be put on the "PEG" list, and students attending those schools are eligible to transfer under the program in the following year. For example, the 2011 PEG list was released in December of 2011, and allowed students to transfer for the 2012-2013 school year. By February 1, school districts with schools on the PEG list are required to notify the parents of students who attend those schools that they are eligible to receive a public education grant for the following school year.[3] The criteria for being put on the PEG list have changed over time, but one of the consistent rules has been that a school will be placed on the PEG list if 50 percent or more of their students did not pass one of a list of state standardized tests in any two of the previous three years.[4]

[1]The authors appreciate valuable feedback on this paper from Chris Taber. This work has been supported in part by the UW - Madison Department of Economics. The conclusions of this research do not necessarily reflect the opinions or official position of the Texas Education Agency, the Texas Higher Education Coordinating Board, the Texas Workforce Commission, or the State of Texas.

[2]News reports like Smith (2013) have previously indicated that few students were taking advantage of the public education grants, but this is just one of many ways that the PEG program could have encouraged transferring behavior. Parents of children at schools on the PEG list are required to be notified that their school has received this designation, and have several transferring options. If parents had reacted by removing their children from public schools, moving them to charter schools, pursuing standard (non-PEG) transferring options, or waiting to move their children across districts until they had finished the highest grade at their school, none of these options would necessarily be associated with a PEG grant. Despite this, we find consistently null effects of the PEG program on a wide array of transferring measures. Part of the reason for this could be that districts receiving PEG transfer students are not required to provide transportation to those students. We hope to explore this possibility more directly in future work.

[3]This is a key point for interpreting the results below. If it were not the case that all parents were required to be notified, one suggestion for why the PEG program is not encouraging transferring could be that the program is not sufficiently well publicized. Given this notification, however, the failure of the PEG program to encourage transferring must come from other factors.

[4]For the 2011 PEG list, this included standardized tests taken in 2009, 2010, and 2011. The list of standardized tests that is used for this rule changes over time. Over the time period that we are studying, TAAS, TAKS, and STAAR exams were all used. The subjects of the exams that counted toward the PEG list also changed over time.

3 Data

The main data that we will use for this paper comes from the Texas Schools Project (TSP). This is a unique data set which links educational data from grades K-12 and colleges to labor force outcomes in Texas. To know which of these schools was on the PEG list, we merge this data with each year's PEG list from the Texas Education Agency's (TEA) Public Education Grant Archive. We also use standardized testing outcomes at the school level from the TEA's Academic Excellence Indicator System (AEIS) and Accountability Rating System.

Table 1 shows some initial summary statistics weighted by students. One of the first things to notice is that schools on the PEG list tend to be there for multiple years. Among schools on the PEG list in a given year, 71.2% of them were on the PEG list in the previous year, compared with only 2.1% for schools not on the PEG list. The table provides initial evidence to support that transferring is more common at PEG list schools—students at PEG schools are 3.2 percentage points more likely to transfer out of their school for the next full academic year, 2.0 percentage points more likely to be enrolled in multiple schools in a given year, and 1.1 percentage points more likely to exit the Texas Public School system.

However, these differences in transferring need not be caused by the PEG program—the rest of the table shows that there are any number of differences between schools on and off the PEG list. Students at schools on the PEG list are substantially more likely to have limited english proficiency, be at risk of dropping out, and have some form of economic disadvantage. In terms of standardized math test scores, students at PEG list schools tend to be about a quarter of a standard deviation below the state average. This is not surprising given that one of the main ways to get onto the PEG list is to have low performance on standardized test scores.

While the differences between schools on and off the PEG list are intuitive, they present a challenge for estimating the effect of PEG list placement. Specifically, if we compute the difference in outcomes between students at PEG list schools and students at non-PEG list schools, we will not know what of this observed difference is coming from being putting on the PEG list, and what is coming from the many other differences between these populations. Even if we were to control directly for the characteristics covered by our variables, the differences documented by those variables likely form a small portion of the full set of differences. Our estimation strategy below will solve this problem by identifying an area in which assignment to the PEG list is plausibly the only difference between certain groups of students. Then, we will compare these student groups to arrive at an estimate of the PEG program's effect.

4 Estimation Strategy

Our estimation strategy exploits the fact that schools are consistently placed on the PEG list if 50 percent or more of their students did not pass one of a list of state standardized tests in any two of the previous three years. Specifically, we limit our sample to schools with failing rates higher than 50 percent on a state standardized test in one of the past two years. Then, we construct a variable which is the maximum failing rate on a state standardized test in the present year.

Among this sample of schools, there is a discontinuity in assignment to the PEG list along the maximum failing rate: All of the schools with a maximum failing rate above 50 percent in the present year will be placed on the PEG list. Logically, however, there ought to be no meaningful difference on average between schools with failing rates just slightly beneath 50 and those with rates just slightly above 50. In simplest terms, when we compare schools having maximum failing rates at 50.00001 with those having maximum failing rates at 49.99999, the only differences we would expect to see have to do with being assigned to the PEG list or not. This means that we can compare these groups to arrive at an estimate for the effect of PEG list placement.

Before sharing the results, we make two additional technical points: First, this is a "fuzzy" discontinuity because those with failing rates below 50 percent may still be placed on the PEG list for different reasons. In other words, the probability that a school will be assigned to the PEG list jumps upward at the discontinuity, but any given school may have been on the PEG list regardless. Second, before assigning schools to the PEG list under this policy, each school's maximum failing rate was rounded to the nearest percent. We focus our analysis on a subset of years in which the specific number of students that failed each test were reported, allowing us to reconstruct the unrounded maximum failing rate. Call this rate F_{jt}. Since this number was rounded before the policy was enforced, the cutoff in F_{jt} occurs at .495.[5]

Given those two points, we will use the following equations to estimate the effects of being placed on the PEG list,

[5]Figure 1 provides evidence of this by showing the discontinuity in PEG list assignment using both 49.5% and 50% as cutoffs. As can be clearly seen, the 49.5% cutoff does a better job of capturing the discontinuity.

represented by P_{jt}, on an outcome of interest Y_{jt}:

$$Y_{jt} = \alpha_t + \alpha_\ell + \alpha_1 \hat{P}_{jt} + \alpha_2 F_{jt} + \alpha_3 F_{jt} \mathbb{1}\left\{F_{jt} \geq .495\right\} + \varepsilon_{jt} \quad (1)$$

$$P_{jt} = \beta_t + \beta_\ell + \beta_1 \mathbb{1}\left\{F_{jt} \geq .495\right\} + \beta_2 F_{jt} + \beta_3 F_{jt} \mathbb{1}\left\{F_{jt} \geq .495\right\} + \eta_{jt} \quad (2)$$

α_t and β_t are time fixed effects, and α_ℓ and β_ℓ are fixed effects for the school level which could be "elementary schools," "middle and transitional schools," or "high schools." For some results, we include each grade level g from a school as a separate observation, so Y_{jt} becomes Y_{jgt}.[6] In these regressions, we additionally include grade-level fixed effects α_g and β_g. α_1 is the main parameter of interest, giving the effect of PEG list placement on the outcome of interest.

5 Results

Section B in the appendix provides tests of manipulation in the running variable and balance tests.

5.1 Long-Term Effects of the PEG Program

Table 2 shows how placing an elementary school on the PEG list affects the long-term outcomes of its students. Each outcome is paired with three numbers: The first gives the estimated effect of being placed on the PEG list ($\hat{\alpha}_1$), the second gives the standard error, and the third gives the number of observations used.[7] For example, students whose school was placed on the PEG list are estimated to be 4.14 percentage points more likely to graduate high school. The standard error for this estimate is .0129 and the number of observations used is 1159.

Beginning from the bottom of the table, there is no statistically significant evidence that being placed on the PEG list induces students to transfer at any point in the future before their anticipated twelfth grade year. We will return to results on transferring below. The rest of the outcomes show positive and substantial effects associated with the PEG program. Elementary students whose school gets placed on the PEG list are 4.14 percentage points more likely to graduate high school, 5.48 points more like to attend a four-year Texas university, and .34 points more likely to specifically attend one of the public flagship universities in Texas.

The next results show the effects of PEG on whether a student will declare a "STEM" major as their first major at a four year university.[8] One minor complication with the data is that we are unable to see the majors that students have while enrolled in private universities prior to 2010. To fix this, the "LB" row gives a lower bound on the effect in which we assume that none of the students who we observe attending private universities before 2010 majored in STEM, and the "UB" row gives the upper bound where we assume that all of those students majored in STEM. As can be seen, students in schools placed on the PEG list become around one percentage point more likely to initially major in STEM regardless of the measure we use.[9]

5.2 Ways that the PEG Program Affects Long-term Outcomes

Having shown that the PEG program does seem to have effects on the long-term outcomes of students, we now turn to investigating possible channels for how it could have this effect. The first channel to investigate is transferring, because the PEG program is designed to encourage students to transfer away from "low-performing" schools. Surprisingly, we find little to no evidence that more students actually transfer under the PEG program. Table 3 shows a wide variety of variables measuring different ways that students could respond to the PEG program by moving schools or enrolling in additional schools. None of these variables show statistically significant evidence of any effect. For many of the variables, the standard errors are small, showing that we are finding null results with a substantial amount of precision.

[6] This is useful for long-term outcomes where we will not observe the outcomes for all grade levels in all years. For example, our measure of graduating high school is whether you graduate high school within two years of what would be expected based on the natural grade progression of advancing a grade each year. In 2015, we will be able to measure this variable for current seniors, but not for first graders. For them, we won't know for sure if they have graduated high school under our definition until 2028.

[7] Because each observation in these regressions is a school-and-grade level combination, we additionally include grade fixed effects in equations (1) and (2).

[8] Here we identify STEM majors as those in the primary two-digit CIP code categories the DHS labels as STEM: 14 (engineering), 26 (biological and biomedical sciences), 27, (mathematics and statistics), and 40 (physical sciences).

[9] It makes sense that these two bounds give the same result because we begin tracking students in 2004, and so it is unlikely that very many students went from being in elementary school in 2004 to attending a private university before 2010. Another way of correcting this issue is just to look at STEM majors declared at public universities, where we can see the enrolled majors prior to 2010. For that row as well, the results are very similar.

Another way the PEG program could influence students is by inducing schools to better prepare students for state standardized tests. The PEG program provides these schools a strong incentive to do so: If schools is able to take actions that lower their maximum failing rates on state standardized tests, then they will be less likely to be placed on the PEG list in the future.

Table 4 shows results relating to standardized tests for elementary school students. The main row to look at is the top one, which shows the maximum failing rate in the school year that the PEG list was announced. Recall that the PEG list for 2011, as an example, was released in December of 2011, and was based on standardized test scores from the 2008-2009, 2009-2010, and 2010-2011 school years. The top row of table 4 shows the effect of PEG list placement on the maximum failing rate in the year that the PEG list was announced. For the 2011 PEG list, this would be the 2011-2012 school year. The results show a substantial decline of around 5 percentage points in the maximum failing rate, or a five percent point increase in the lowest passing rate. Table 2 shows a corresponding discontinuity plot, display the clear difference between schools with failing rates just above and just below the PEG assignment cutoff.

The next row of table 4 shows the effects of the PEG program on the maximum failing rate in the school year after the PEG list was announced. In the case of the 2011 PEG list, this would be the maximum failing rate from the 2012-2013 school year. Here the results are negative but statistically insignificant, suggesting that the actions school administrators take to improve test scores do not persist as strongly into the following year.

6 Conclusion

In this paper, we evaluate the effects of the public education grant (PEG) program, a long-running school accountability initiative in Texas meant to encourage students at lower-performing schools to transfer. We find substantial effects of the program on long-term outcomes like graduating high school, attending a Texas four-year university, and pursuing a STEM degree. However, there is little evidence that these effects are driven by increases in student transferring. Instead, we find evidence that the positive effects of the PEG program may be coming through efforts to improve standardized testing results. In this way, it seems that the PEG program is functioning more as an accountability program for school standardized test scores than it is as a student transferring program.

Given the long-term benefits of the current PEG program, we would still recommend that the program continue. However, the program will need to be altered if it is to achieve increased student transferring. One possible avenue to explore in this area would be to provide transportation to students that are transferring school districts. Without this provision, the time and money required for daily transportation presents a potentially large cost to transferring for students and their families.

In future work, we intend to measure the distance that students would need to commute each day in order to transfer, and then estimate the influence that this distance has on a student's transferring decisions. Our hope is that this will give us a sense of the weight that students place on transportation in their decision making, and help us to understand the potential gains of publicly provided transportation options.

References

Subchapter g. public education grant program. 31 Tex. Educ. Code § 29.201-205, may 2022.

Matias D. Cattaneo, Michael Jansson, and Xinwei Ma. Manipulation testing based on density discontinuity. *The Stata Journal*, 18(1):234–261, 2018.

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Appendix

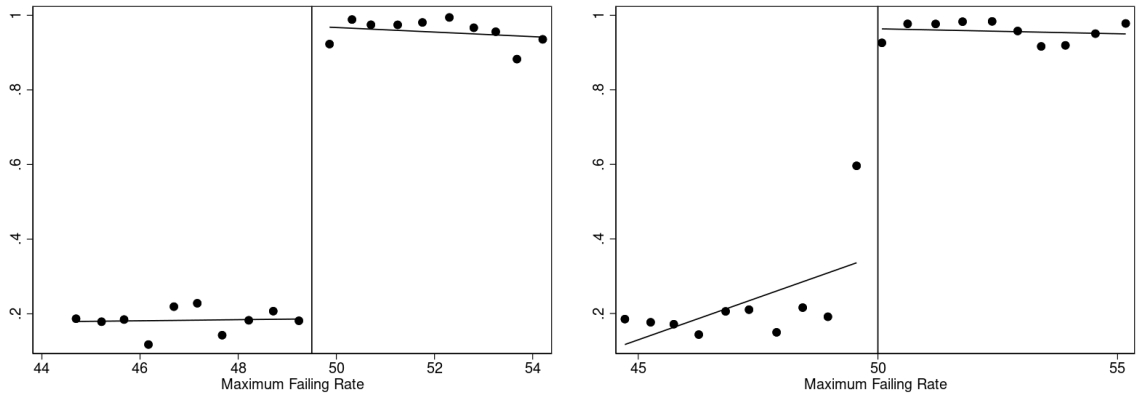
A Tables and Figures

Table 1: Descriptive Statistics

	All Students			Not On Peg List			On Peg List		
	Mean	SD	Tot. Stu	Mean	SD	Tot. Stu	Mean	SD	Tot. Stu
On the PEG List	0.093	0.291	84,123,283	0.000	0.000	76,295,113	1.000	0.000	7,828,170
On Last Year's PEG List	0.088	0.284	79,651,617	0.021	0.144	71,907,739	0.712	0.453	7,743,878
Transfer for Full Year	0.147	0.106	63,824,906	0.144	0.106	57,855,989	0.176	0.108	5,968,917
Transfer Within Year	0.000	0.001	63,824,906	0.000	0.001	57,855,989	0.000	0.001	5,968,917
Recorded as Transfer Student	0.019	0.041	84,123,283	0.019	0.041	76,295,113	0.014	0.034	7,828,170
Exit TX Public Schools	0.057	0.052	63,824,906	0.056	0.052	57,855,989	0.067	0.049	5,968,917
Enrolled in Multiple Schools	0.107	0.118	84,123,283	0.105	0.117	76,295,113	0.125	0.122	7,828,170
At Risk of Dropping Out	0.461	0.207	84,123,283	0.442	0.202	76,295,113	0.647	0.155	7,828,170
Male	0.513	0.033	84,123,283	0.513	0.033	76,295,113	0.515	0.028	7,828,170
Race: Asian	0.035	0.063	84,123,283	0.038	0.065	76,295,113	0.013	0.026	7,828,170
Race: Black	0.134	0.169	84,123,283	0.125	0.157	76,295,113	0.215	0.241	7,828,170
Race: Hispanic	0.472	0.308	84,123,283	0.456	0.306	76,295,113	0.622	0.286	7,828,170
Race: White	0.347	0.287	84,123,283	0.368	0.286	76,295,113	0.140	0.193	7,828,170
Economic Disadvantage Status	0.551	0.280	84,123,283	0.528	0.279	76,295,113	0.771	0.179	7,828,170
Limited English Proficiency	0.174	0.193	84,123,283	0.167	0.189	76,295,113	0.248	0.213	7,828,170
Math Test Score, Year PEG list Announced	0.001	0.284	41,093,682	0.026	0.276	37,336,631	-0.246	0.236	3,757,051

Note: The "Tot. Stu" column shows the number of student and school year combinations in the sample, so a student could be included as a separate observation here for each year that they enroll in a Texas public school.

Figure 1: Percent of Schools on the PEG list, using Alternative Cutoffs



(a) Using 49.5% as the Cutoff

(b) Using 50% as the Cutoff

B Testing the Validity of the Regression Discontinuity Design

In this section we do two things to test the validity of the regression discontinuity design. First, we do a manipulation test for the running variable using the package provided by Cattaneo et al. (2018). The idea of this test is that if schools were able to manipulate their failing rates, then out of a desire to avoid being placed on the PEG list the schools with maximum failing rates just above the cutoff may lower themselves beneath the cutoff to escape being put on the PEG list. This would create a larger mass of observations to the left of the cutoff than to the right.

Before running the test, we have strong reason to believe that there is not manipulation in this running variable. The TEA has a group of "Performance-Based Monitoring" staff which develop methods of validating student assessment data.[10]

[10]For a list of manuals describing how this data validation is completed, see https://tea.texas.gov/student-assessment/monitoring-and-

Table 2: Long-term Effects of PEG for Elementary Schools

	b/se/mat_obs
First Maj. in STEM, LB	0.0097**
	(0.0036)
	1159
First Maj. in STEM, UB	0.0097**
	(0.0036)
	1159
First Maj. in STEM, Public	0.0097**
	(0.0035)
	1159
Went to Pub./Priv. TX Uni.	0.0548***
	(0.0138)
	1159
First Uni. TX Public Flagship	0.0034*
	(0.0014)
	1159
Graduated HS	0.0414**
	(0.0129)
	1159
Transfer before Antic. 12th Gr. Yr.	-0.0156
	(0.0203)
	1416
Transfer Districts before Antic. 12th Gr. Yr.	0.0084
	(0.0184)
	1416
Changed Districts before Antic. 12th Gr. Yr.	-0.0249
	(0.0175)
	1416
Rounded to Percent	No
Bandwidth	5
Kernel	Triangular

Standard error are nearest-neighbor clustered at the district level. The bandwidth is 5 percentage points, meaning that schools with maximum failing rates between 5 percent above and below 49.5 are included in the estimation.

Table 3: Effects of PEG Program on Transferring for Elementary Schools

	b/se/mat_obs
Exit TX Public Schools	-0.0006
	(0.0037)
	2502
Transfer for Full Year	0.0094
	(0.0121)
	2502
Transfer Districts for Full Year	-0.0009
	(0.0059)
	2502
Enrolled in Multiple Schools	0.0070
	(0.0069)
	2526
Enrolled in Multiple Districts	0.0070
	(0.0069)
	2526
Recorded as Transfer Student	0.0020
	(0.0060)
	2526
Recorded as Transfer in Diff District	0.0007
	(0.0011)
	2526
Transfer Districts for Full Yr. to non-PEG	-0.0003
	(0.0054)
	2502
Transfer for Full Yr. to non-PEG	0.0064
	(0.0100)
	2502
Enrolled in Multiple Schools Year PEG list Announced	-0.0016
	(0.0069)
	2526
Enrolled in Multiple Districts Year PEG list Announced	-0.0016
	(0.0069)
	2526
Percent Change in Entering Enrollment	-5.0528
	(3.0682)
	2493
Rounded to Percent	No
Bandwidth	5
Kernel	Triangular

Table 4: Effects of PEG Program on Test Scores at Elementary Schools

	b/se/mat_obs
Max Fail Rate, year PEG list Announced	-4.4926**
	(1.6033)
	848
Max Fail Rate, year after PEG list Announced	-2.1793
	(2.6861)
	663
Rounded to Percent	No
Bandwidth	5
Kernel	Triangular

Figure 2: Maximum Failing Rate at Elementary Schools the Year the PEG List is Announced. Uses a Bandwidth of 5 Percentage Points

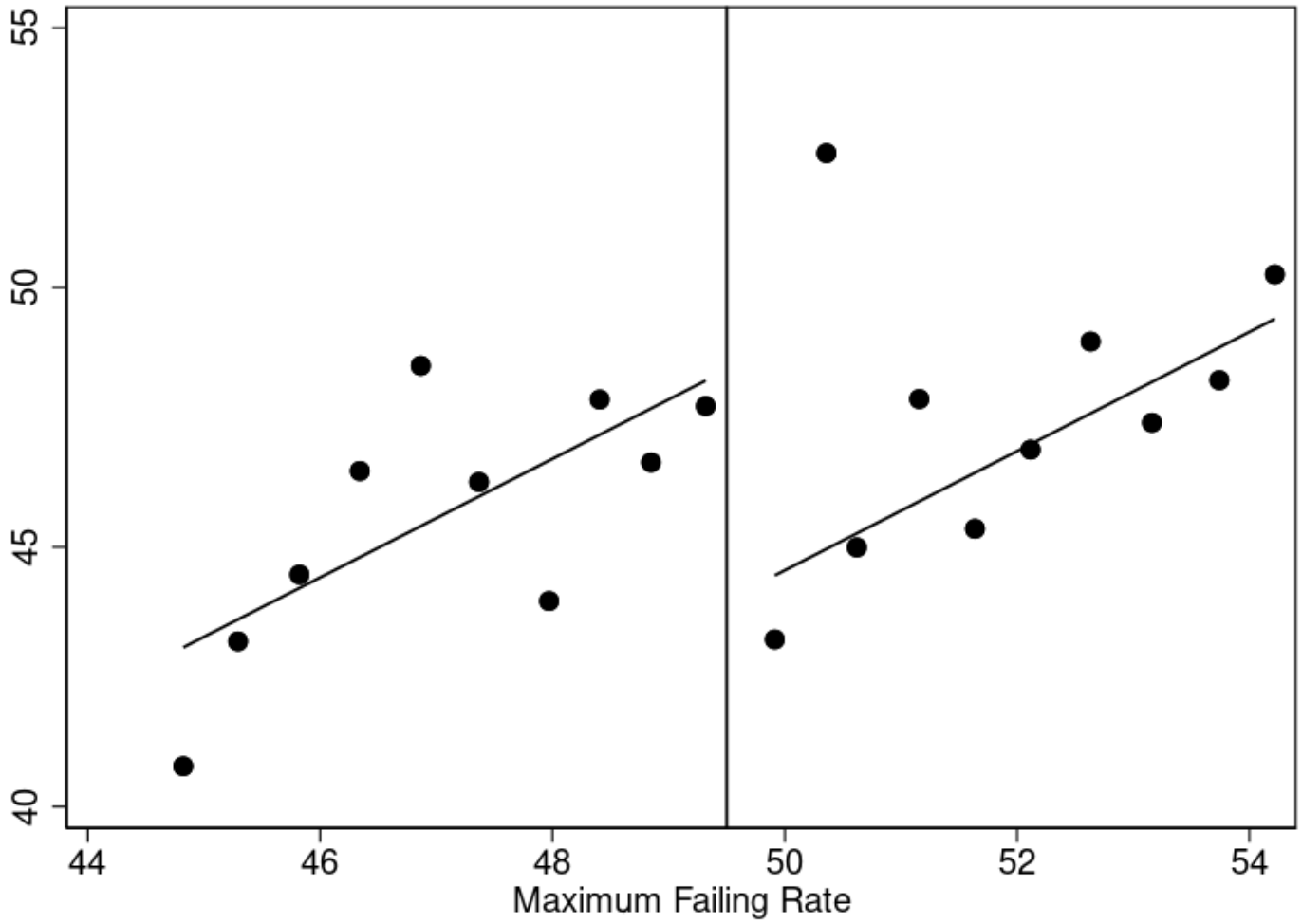


Figure 3: Bandwidth of 5

While there are still reports of schools cheating on standardized exams, intentionally manipulating the maximum failing rate around the vicinity of the cutoff would involve the difficult task of figuring out that the failing rate on a certain test was near 50%, and then somehow correcting enough answers on enough tests to meaningfully change that failing rate.

The results of the test are shown in table 5, separated out for "High Schools," "Elementary Schools," and the combined category "All Schools" which also includes middle and transitional schools. The first number reported in each group of four is the p-value, then the school observations used within the chosen bandwidth, then the bandwidth, and finally the estimated difference in densities around the cutoff. The different columns change the size of the bandwidth used and the order of the polynomial used. With the notable exception of the results with the smallest bandwidth of two percentage points, the p-values for "All Schools" indicate that the null hypothesis of no manipulation cannot be rejected at the 5% level. The results associated with elementary schools are more mixed, and we intend to look more into this in the future.

Table 5: Running Variable Manipulation Tests

	p/obs/h/diff	p/obs/h/diff	p/obs/h/diff	p/obs/h/diff	p/obs/h/diff	p/obs/h/diff	p/obs/h/diff	p/obs/h/diff
High Schools	0.043	0.626	0.002	0.000	0.894	0.746	0.504	0.654
	278	1,714	225	225	620	620	953	953
	2.418	17.522	2.000	2.000	5.000	5.000	8.000	8.000
	0.018	0.002	0.032	0.076	-0.001	0.003	0.003	0.003
Elementary Schools	0.052	0.020	0.141	0.000	0.016	0.141	0.022	0.021
	1,913	1,568	434	434	1,035	1,035	1,554	1,554
	10.142	8.075	2.000	2.000	5.000	5.000	8.000	8.000
	-0.005	-0.011	0.010	0.045	-0.009	-0.009	-0.007	-0.011
All Schools	0.142	0.157	0.000	0.000	0.099	0.619	0.137	0.157
	2,348	3,731	1,023	1,023	2,526	2,526	3,860	3,860
	4.614	7.728	2.000	2.000	5.000	5.000	8.000	8.000
	-0.004	-0.005	0.021	0.058	-0.004	0.002	-0.003	-0.005
Order	1	2	1	2	1	2	1	2

The second thing that we do in this section to test the validity of the regression discontinuity design is to report balance tests for variables that should not be affected by assignment to the PEG list. Tables 6 through 8 show the results. As with our main results from section 5, standard errors are nearest-neighbor clustered at the district level. The coefficient estimates are not statistically significant for any of the variables or bandwidths we consider.

interventions/data-validation-monitoring/data-validation-manuals

Table 6: Balance Tests for All Schools

	b/se/mat_obs	b/se/mat_obs	b/se/mat_obs
At Risk of Dropping Out	-0.0133	-0.0247	-0.0065
	(0.0262)	(0.0348)	(0.0246)
	2526	1023	3853
(mean) gifted	0.0002	0.0021	0.0046
	(0.0084)	(0.0119)	(0.0077)
	2526	1023	3853
(mean) immig	-0.0020	0.0002	-0.0039
	(0.0063)	(0.0106)	(0.0059)
	2526	1023	3853
Male	-0.0032	-0.0038	-0.0029
	(0.0030)	(0.0047)	(0.0025)
	2526	1023	3853
(mean) speced	-0.0034	-0.0008	-0.0063
	(0.0061)	(0.0083)	(0.0052)
	2526	1023	3853
(mean) native_american	-0.0002	0.0007	-0.0005
	(0.0009)	(0.0011)	(0.0008)
	2526	1023	3853
Race: Asian	0.0069	0.0144	0.0042
	(0.0052)	(0.0095)	(0.0040)
	2526	1023	3853
Race: Black	0.0006	0.0088	0.0074
	(0.0447)	(0.0632)	(0.0405)
	2526	1023	3853
Race: Hispanic	-0.0186	-0.0600	-0.0120
	(0.0515)	(0.0719)	(0.0466)
	2526	1023	3853
Race: White	0.0089	0.0309	-0.0003
	(0.0352)	(0.0457)	(0.0324)
	2526	1023	3853
(mean) two_or_more_races	0.0023	0.0053	0.0013
	(0.0023)	(0.0036)	(0.0019)
	2526	1023	3853
(mean) biling_any	-0.0349	-0.0521	-0.0215
	(0.0254)	(0.0414)	(0.0213)
	2526	1023	3853
Economic Disadvantage Status	-0.0137	-0.0449	-0.0034
	(0.0294)	(0.0376)	(0.0262)
	2526	1023	3853
(mean) esl_any	0.0456*	0.0590	0.0333
	(0.0226)	(0.0320)	(0.0212)
	2526	1023	3853
Limited English Proficiency	0.0186	0.0231	0.0206
	(0.0411)	(0.0563)	(0.0400)
	2526	1023	3853
on_peg_list_lag	0.0710	0.0773	0.0574
	(0.0648)	(0.0936)	(0.0553)
	2526	1023	3853
Rounded to Percent	No	No	No
Bandwidth	5	2	8
Kernel	Triangular	Triangular	Triangular

Table 7: Balance Tests for Elementary Schools

	b/se/mat_obs	b/se/mat_obs	b/se/mat_obs
At Risk of Dropping Out	-0.0504	-0.0514	-0.0377
	(0.0340)	(0.0424)	(0.0316)
	1035	434	1552
(mean) gifted	-0.0060	-0.0014	-0.0034
	(0.0095)	(0.0117)	(0.0089)
	1035	434	1552
(mean) immig	0.0034	0.0148	-0.0007
	(0.0099)	(0.0203)	(0.0088)
	1035	434	1552
Male	-0.0057	-0.0069	-0.0033
	(0.0036)	(0.0051)	(0.0034)
	1035	434	1552
(mean) speced	0.0018	0.0003	0.0004
	(0.0057)	(0.0073)	(0.0052)
	1035	434	1552
(mean) native_american	0.0003	0.0006	-0.0008
	(0.0015)	(0.0017)	(0.0015)
	1035	434	1552
Race: Asian	0.0115	0.0197	0.0083
	(0.0076)	(0.0152)	(0.0063)
	1035	434	1552
Race: Black	0.0532	0.0837	0.0594
	(0.0516)	(0.0714)	(0.0475)
	1035	434	1552
Race: Hispanic	-0.0790	-0.1359	-0.0615
	(0.0540)	(0.0777)	(0.0494)
	1035	434	1552
Race: White	0.0121	0.0292	-0.0056
	(0.0233)	(0.0286)	(0.0230)
	1035	434	1552
(mean) two_or_more_races	0.0019	0.0028	0.0002
	(0.0031)	(0.0040)	(0.0027)
	1035	434	1552
(mean) biling_any	-0.0852	-0.1269*	-0.0683
	(0.0487)	(0.0633)	(0.0480)
	1035	434	1552
Economic Disadvantage Status	-0.0280	-0.0466	-0.0170
	(0.0211)	(0.0245)	(0.0200)
	1035	434	1552
(mean) esl_any	0.0241	0.0519	0.0116
	(0.0196)	(0.0330)	(0.0174)
	1035	434	1552
Limited English Proficiency	-0.0599	-0.0652	-0.0546
	(0.0513)	(0.0697)	(0.0499)
	1035	434	1552
on_peg_list_lag	0.0488	0.1350	0.0060
	(0.0847)	(0.1317)	(0.0765)
	1035	434	1552
Rounded to Percent	No	No	No
Bandwidth	5	2	8
Kernel	Triangular	Triangular	Triangular

Table 8: Balance Tests for High Schools

	b/se/mat_obs	b/se/mat_obs	b/se/mat_obs
At Risk of Dropping Out	0.0080	-0.0089	0.0099
	(0.0447)	(0.0728)	(0.0378)
	620	225	952
(mean) gifted	-0.0039	0.0096	0.0009
	(0.0160)	(0.0315)	(0.0119)
	620	225	952
(mean) immig	-0.0073	-0.0152	-0.0079
	(0.0080)	(0.0177)	(0.0065)
	620	225	952
Male	-0.0052	0.0005	-0.0048
	(0.0075)	(0.0119)	(0.0056)
	620	225	952
(mean) speced	-0.0143	-0.0108	-0.0144
	(0.0133)	(0.0265)	(0.0093)
	620	225	952
(mean) native_american	-0.0009	0.0014	-0.0007
	(0.0011)	(0.0020)	(0.0008)
	620	225	952
Race: Asian	0.0058	0.0143	0.0019
	(0.0125)	(0.0246)	(0.0083)
	620	225	952
Race: Black	-0.0655	-0.0886	-0.0499
	(0.0938)	(0.1745)	(0.0693)
	620	225	952
Race: Hispanic	0.0420	-0.0343	0.0473
	(0.1141)	(0.1907)	(0.0895)
	620	225	952
Race: White	0.0148	0.0954	-0.0011
	(0.0784)	(0.1840)	(0.0581)
	620	225	952
(mean) two_or_more_races	0.0038	0.0118	0.0025
	(0.0032)	(0.0064)	(0.0023)
	620	225	952
(mean) biling_any	0.0000	-0.0001	0.0004
	(0.0003)	(0.0001)	(0.0006)
	620	225	952
Economic Disadvantage Status	-0.0092	-0.1292	0.0080
	(0.0737)	(0.1597)	(0.0543)
	620	225	952
(mean) esl_any	0.0504	0.0481	0.0526
	(0.0413)	(0.0797)	(0.0333)
	620	225	952
Limited English Proficiency	0.0783	0.0964	0.0745
	(0.0489)	(0.0957)	(0.0401)
	620	225	952
on_peg_list_lag	0.1138	0.1900	0.1269
	(0.1462)	(0.2568)	(0.1073)
	620	225	952
Rounded to Percent	No	No	No
Bandwidth	5	2	8
Kernel	Triangular	Triangular	Triangular