

Making FAFSA Mandatory: An Evaluation of Louisiana's Financial Aid Submission Policy on College Enrollment and Pell Grant Awards

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Abstract

Aiming to reduce inequalities between low- and high-income students enrolling in college, many states have proposed legislation requiring high school students to file a FAFSA application, or opt-out, prior to graduation. Louisiana was the first to implement this policy in the 2017-2018 academic year, thus potentially impacting enrollments in Fall 2018. FAFSA submissions increased significantly in Louisiana following the policy change, suggesting there may have been some follow through into post-secondary institutions. I use a synthetic control approach to estimate causal impacts of Louisiana's FAFSA policy on college enrollment and Pell Grant awards. I find suggestive evidence that students may have substituted away from public two-year institutions towards four-year institutions. Specifically, I find marginally significant effects on enrollment for Black students at large, public four-year universities.

1 Introduction

Each year, approximately 20 million students complete the Free Application for Federal Student Aid (FAFSA) application. However, FAFSA completion differs across various economic and socio-demographic groups—completion rates are higher among the higher performing students, among those with higher expected family contributions, and among those of parents who attended college (Feeney & Heroff, 2013).¹

With the objective of encouraging more students to complete a FAFSA form and enroll in college, in 2017, Louisiana enacted legislation requiring high-school students to submit a FAFSA application as a prerequisite for graduation. To take effect with the incoming Fall 2018 cohort, this policy was initiated with the 2017–2018 high school seniors.

While not likely to induce enrollment among those who would already have been inclined to complete the FAFSA absent the mandate, for those marginal students—around the margin of receiving aid—this may well move these students toward completing a financial aid application. In particular, then, we might expect such a mandate to expand access to higher education for students from historically disadvantaged backgrounds, where FAFSA applications are lowest (Lowry, 2018) and college going is less the norm (Hussar *et al.*, 2020). Moreover, given that the FAFSA submission will have student, at least for a time, be forward-looking in their college plans, we might also expect that this information about financial aid would influence a student’s decision to enroll (Dynarski, 2000; Cornwell *et al.*, 2006), as well as the type and quality of the institution a student attends (Avery & Hoxby, 2004; Bruce & Carruthers, 2014). Understanding the extent to which mandatory FAFSA policies induce students to enroll in college or to substitute between types post-secondary institutions is important, as students—particularly lower-skill students—are significantly more likely to earn a bachelor’s degree if they start at a four-year school rather than a two-year college (Goodman *et al.*, 2017).

In the two years since the FAFSA mandate, Louisiana did see large increases in FAFSA submissions—approximately 25% increases relative to the 2016-2017 academic year, before the initiation of the mandate.² But at the same time, Louisiana had already been experiencing a steady increase in college enrollments (Louisiana Department of Education, 2019), making the interpretation of such uncon-

¹ There is differences in the filing status across students’ gender, race/ethnicity, income status, and pre-college academic experiences (McKinney & Novak, 2013, 2015).

² In the 2017-2018 academic year, Louisiana also saw a 31% increase the number of students eligible for the Taylor Opportunity Program for Students (TOPS) Scholarship, which provides state scholarships for students who are attending public two-year or public four-year institutions in Louisiana (DeBauw, n.d.).

ditioned increases challenging. Moreover, increasing numbers of high-school graduates in Louisiana (since 2012) also implicate a potential confoundedness—reported results in Louisiana Department of Education (2019) imply that adjusting for the size of graduating high-school students, enrollment in Louisiana *decreased* by 0.34 percentage points between Fall 2017 and Fall 2018.

Given the raw increases in FAFSA submissions and college enrollment, Louisiana’s policy has largely been viewed as a success—so much so that many states have either proposed similar legislation or are in the process of implementing similar mandates. Among other early adopters, for example, Illinois required FAFSA submission prior to high-school graduation beginning with the Fall 2021 college cohort, and Texas and Alabama will require FAFSA submission beginning with the Fall 2022 (i.e., the 2021–2022 graduating seniors). Now 13 other states have proposed mandatory FAFSA legislation.³

In this paper, I consider whether there are evident increased in college going that can be attributed to Louisiana’s mandatory FAFSA submission policy. In order to do so, I compare outcomes in Louisiana—and post-secondary enrollments and total Pell Grant awards—to outcomes in a “synthetic” Louisiana, before and after the policy change. To the extent outcomes in Louisiana increase relative to a control group that was *similar* to Louisiana in its outcomes prior to the innovation in policy, we will be inclined to attribute those increases to the mandated FAFSA completion.

Comparing Louisiana’s outcomes in the post-treatment period to those in Louisiana’s synthetic counterfactual, I find that relative changes in college enrollment and Pell Grant awards are small—I cannot rule out that the aggregate effect is zero. As the FAFSA mandate came with no real increase in funding for high schools, that there are no significant increases attributable to the policy is potentially unsurprising.⁴ Moreover, its implementation may have put additional stress on understaffed schools, and to the extent high-school counselors play a role in the school’s college-going rate (Hurwitz & Howell, 2014; Engberg & Gilbert, 2014), *lowered* access. Either way, our priors may be for the policy to have least benefited students who would have the most to gain from submitting a FAFSA application. Absent adequate information and assistance on financial aid and college pricing, these policies may not be enough to induce students on the margin into enrolling in college.

That said, there are margins at which there are economically meaningful changes, and in places are consistent with the policy having influenced students more likely to be marginal in their enrollment

³ See Figure 1 for a map of states where this policy has been proposed or enacted.

⁴ The Louisiana Office of Student Financial Assistance did receive a grant from the National College Attainment Network for their FAFSA Completion Tracker, which monitors FAFSA completions at the state, district, and school levels.

decisions. For example, as the policy may have induced students to substitute between two-year and four-year institutions, I consider enrollments and financial aid separately across the type of institution. There, I find that suggestive evidence that students may have substituted away from public two-year schools into four-year schools. To the extent this is generally true, substitution between two-year and four-year schools does not appear in the aggregate—estimates are small and statistically indistinguishable from zero. That said, I will show that this is particularly true for Black students, who are disproportionately likely to be attending less-resourced schools with less college-related counseling (McDonough, 1997; McDonough, 2004). For all other students, there is no meaningful variation in two- and four-year enrollments that can be attributed to the policy change—estimates are precisely estimated null effects.

To the extent that the FAFSA mandate induces students toward receiving more/better information about their financial eligibility, we might expect that the total value of all Pell grants awarded in Louisiana could respond to the policy, despite the lack of a significant enrollment response. In fact, it is at lower-cost, public four-year institutions and public two-year institutions where I find suggestive evidence that Pell Grant awards may have *increased* with the onset of the FAFSA mandate—this is consistent with students who would have otherwise not filed a FAFSA (absent the mandate) learning about Pell Grant eligibility through the mandate-induced FAFSA process and accepting a grant, despite not switching their enrollment behavior.

In Section 2 I discuss previous literature on financial aid and college enrollment. In Section 3 I outline the data used in my analyses. I provide details on my empirical strategy used to identify the causal impact of Louisiana’s policy on enrollment and Pell Grant awards and present results in Section 5. I offer concluding comments in Section 6.

2 Financial Aid and College Enrollment

Becker’s model of human capital predicts that an exogenous reduction in tuition would induce students on the margin into enrolling in college (Becker, 1964). Empirically, there is plenty of evidence that suggests financial aid can have large impacts on college enrollment (Dynarski, 2000, 2003; Seftor & Turner, 2002; Kane, 2003). However, many eligible students do not apply for financial aid and forgo large amounts of financial assistance (King, 2006). It has been argued that the complexity and inconvenience of the FAFSA form deters many students from applying for aid, thus contributing to

college enrollment gaps between low-income and high-income students (Dynarski & Scott-Clayton, 2006). This is not because low-income students do not value a college education; low-income students with high valuations of college often fail to clear seemingly minor hurdles in the process of applying for college and financial aid (Avery & Kane, 2004).

There is a growing behavioral literature that studies the reasons for low take-up of financial aid. Perhaps the most relevant to this paper is the literature on default-options. That is, economic decisions are influenced by the individual's status-quo option (Samuelson & Zeckhauser, 1988). For example, changing employees' 401k forms to make participation the default option increased participation by 50 percentage points (Madrian & Shea, 2001), from a baseline of about 37%. Louisiana's FAFSA mandate changes the default option to participation, requiring that students opt-out of submitting the FAFSA rather than opt-in. As the default option is now to submit a FAFSA application, students who were on the margin of completing one because they were previously unwilling to do so or were discouraged from applying may be induced into applying for financial aid. This may help students pass a major barrier in the college application process and therefore may translate into increased college enrollments, as students may now be more informed about their financial aid options.

There have also been several studies imposing "nudges" on potential college enrollees by providing information or personal assistance to help with the FAFSA process. Using a randomized experiment, Bettinger *et al.* (2012) finds that students who receive assistance completing the FAFSA form are significantly more likely to complete two years of college, but students provided with only information and no assistance did not see improved outcomes. Text message programs that provide reminders about filing the FAFSA have also been effective in inducing students to complete a FAFSA application (Page *et al.*, 2020) and to inducing students toward persisting in college (Castleman & Page, 2016). These findings suggest that using small nudges to simplify the FAFSA application process and providing students and parents with information about that process may result in increased rates of students who complete the application and qualify for aid. Though not mandated in Louisiana's policy, in putting the FAFSA filing into practice, the Louisiana Office of Student Financial Assistance used similar technologies that could be thought of as "nudges," in their attempts to encourage students to complete their application—phone calls and text messages were used to remind parents about FAFSA-related events and financial aid workshops, for example. Thus, to the extent movement in enrollment around the policy innovation are evident in Louisiana, I will be inclined to interpret them as inclusive

of the use of such technologies.

3 Data

To examine changes in FAFSA submission, I use data from Federal Student Aid, which provides school-level data on the number of submitted and completed FAFSA applications for each application cycle. I collect this data for the 2014-2015 academic year through the 2019-2020 academic year. I also use school-level data from the Louisiana Department of Education to calculate the percentage of minority students and the percentage of free/reduced priced lunch students enrolled at each school.

To examine the impact of the FAFSA policy on post-secondary outcomes, I use data from the Integrated Post-Secondary Education System (IPEDS), an intergration of surveys of post-secondary institutions conducted by the US Department of Education. I restrict my sample of institutions to degree-granting institutions that have full-time undergraduate students enrolled during the fall semesters of 2010-2019. The enrollment outcome of interest is full-time, first-time degree/certificate-seeking (FTF) undergraduate enrollment. I also collect data on Pell Grant awards for FTF students, defined as the total amount of Pell grant aid awarded to full-time first-time undergraduates, and the price of tuition for each institution. Data on financial aid is only available through 2018, giving one year of post-treatment information.

4 Empirics

4.1 FAFSA Submissions

In Figure 2 I plot FAFSA application submissions for Louisiana and the United States average. Co-incident with the policy introduction, there is an evident increase the number of FAFSA application submitted in Louisiana relative to the rest of the United States. In 2019, Louisiana's submissions fall slightly. To estimate the causal impact of Louisiana's policy on FAFSA submissions, I use a simple difference-in-differences desgin. I compare FAFSA submission in Louisiana to FAFSA submissions in the rest of the United States, before and after the policy change. Specifically, I estimate

$$Y_{st} = \text{Treated}_{st} + \alpha_s + \delta_t + \varepsilon_{st} \quad (1)$$

where Y_{st} is the number of FAFSA applications submitted in state s in academic year t , $Treated_{st}$ is an indicator variable equal to one for Louisiana in the academic years 2017-2018 and 2018-2019. I include a state fixed effect, α_s , and a time fixed effect, δ_t , and cluster my standard errors at the state level. Results indicate that FAFSA submissions in Louisiana increased by an average of 4913 applications ($p < .001$) in the post-treatment years, relative to the rest of the United States. I also perform this analysis at the school-level, where I estimate that FAFSA submissions in Louisiana increased by an average of nine applications ($p < .001$) per school in the post-treatment period, relative to other high schools in the United States.

While FAFSA submissions increased statewide, we should also consider how factors such as income status or race/ethnicity affect FAFSA submission, as these are the margins in which we could imagine this policy having the greatest impact. In Figure 3 Panel A I plot the FAFSA submission rate for schools in the top 10 percent and bottom 10 percent for minority student enrollment. Schools with the highest share minority students have a minority student enrollment of 96% or greater and schools with the lowest share minority students have a minority student enrollment of 10% or less. Prior to the policy introduction, the submission gap between high-share and low-share minority schools is increasing; the gap is 9.61 percentage points in 2017. While the submission rate increased from 2017 to 2018 for both groups, the submission rate for low-share minority schools increased more than the rate for high-share minority schools, further expanding submission gap to 11.07 percentage points. Both groups see a decrease in the submission rate in the second year policy, with the low-share minority schools roughly matching the rate of the high-share minority schools.

I perform a similar exercise for income, using free/reduced priced lunch status as proxy for income status. Schools with highest share of low-income students have more than 90% of students on free/reduced priced lunch and schools with the lowest share of low-income students have less than 45% of students on free/reduced priced lunch. In Figure 3 Panel B we can see there exists a gap in the submission rate between schools with many low-income students and schools with few low-income students, prior to the policy introduction. This gap is about 8.68 percentage points in 2017. FAFSA submission rates increase for both both groups after the policy change and the submission rate gap decreased slightly to 7.26 percentage points in 2018. However, we can see that submission rates fall in 2019 for schools with many low-income students, thus the increasing the submission gap to 10.2 percentage points—larger than the gap prior to the policy introduction.

Given this, there is little evidence that mandatory FAFSA submission affected gaps in filing between low-income and high-income schools or between low-share and high-share minority enrollment schools. Students in relatively affluent schools are probably more likely to have access to the types of resources it takes to get more students to submit the FAFSA, which could explain why we see slightly larger movements in the submission rates at higher income and low-share minority school relative to low-income and high-share minority schools. We should also consider that Louisiana's policy requires *submission*, not *completion*. Submitted applications reflect all FAFSA forms submitted by students at a high school but these application can be rejected if they are missing key pieces of information. Students who submit a FAFSA application but do not complete it are not eligible for financial aid. Requiring submission, not completion, may miss these students who are trying to become eligible for aid but are failing to clear hurdles in completing the financial aid application and thus preventing them from gaining necessary information about the costs of college attendance.

4.2 Enrollment and Pell Grant Awards

In Figure 4 I plot the trend in first-time undergraduate fall enrollment for Louisiana and the United States average. Based on these figures, it does appear that college enrollments increased in Louisiana after the policy introduction for public four-year and private four-year institutions. Ideally, to identify causal impacts of Louisiana's FAFSA policy on enrollment and Pell Grant awards, we would use a difference-in-differences design to compare outcomes in Louisiana to outcomes in a set of control states, before and after the policy change. However, finding an appropriate control group to perform this analysis proves difficult. To use a difference-in-differences design, it is required that the states in the control group trend in the same way as Louisiana prior to the policy change. Figure 4 suggests that Louisiana's enrollments do not trend in the same way as the United States average prior to the policy introduction. This is particularly true when examining enrollment by race/ethnicity.⁵ This suggests that the parallel trends assumption required for difference-in-differences is likely violated. One solution to this violation may be to narrow the control group down to include only other southern states or states that border Louisiana. Doing so may also be problematic because Louisiana's FAFSA policy may have led to increases in enrollments in surrounding states, as colleges in these states are also competing for students from Louisiana. Approximately 11% of Louisiana FTF students enrolled in

⁵ See Appendix for corresponding figures.

out-of-state colleges in Fall 2018 (Louisiana Department of Education, 2019), so it is possible that states near Louisiana saw an increase in enrollment due to Louisiana's FAFSA policy change. Therefore, surrounding states cannot serve as a reasonable control group for Louisiana because institutions in these states may have also been affected by the policy change. Without a reasonable control group, difference-in-differences would yield biased estimates of the impact of mandatory FAFSA legislation on enrollment and Pell Grant awards.

To estimate the causal impact of Louisiana's FAFSA policy on enrollment and Pell Grant awards, I use the synthetic control method. The synthetic control method (Abadie *et al.*, 2010) relaxes the parallel trends assumption and constructs a control unit as counterfactual for the treated unit by weighting each control unit using the pre-treatment periods. The weights are chosen such that, prior to the policy change, the treated unit and its synthetic control have similarly trending outcomes. Using synthetic control, I am able to estimate the effect of the policy change by comparing post-treatment outcomes in Louisiana to post-treatment outcomes for the synthetic counterpart. In this paper, I use the Generalized Synthetic Control Method developed by Xu (2017). This method not only allows me to match units on pre-treatment observables, but also to model unobserved time-varying heterogeneities using interactive fixed effects. To avoid biasing my estimates, I use a relatively long pre-treatment window of 2010-2017 and match only on outcomes.⁶

4.2.1 Enrollment Results

In Figure 5 I plot synthetic control results for each institution type. The outcome variable of interest is FTF enrollment. In each figure, actual FTF enrollment for Louisiana is represented by the black line and the synthetic control unit. Panel A includes all states as potential donors to the synthetic control, Panel B excludes neighboring states to Louisiana, and Panel C excludes any state with a school in the Southeastern Conference for NCAA athletics. I exclude the neighboring states as these states may have been influenced by the FAFSA policy due to the possibility of Louisiana high school students enrolling in out-of-state colleges in nearby states.⁷ I exclude the states with an SEC school because students who are considering large, public universities in Louisiana may also be considering large, public universities in other states within the same athletic conference. Including these states

⁶ I implement the generalized synthetic control method using the "gsynth" package in R (Xu & Liu, 2018).

⁷ The states excluded from this sample are: Alabama, Arkansas, Mississippi, Missouri, Oklahoma, Tennessee, and Texas.

in the potential donor pool may lead to double counting, as the policy could have induced students who would have otherwise enrolled in an out-of-state school to enroll in a school in Louisiana, thus decreasing enrollment in the other state and increasing enrollment in Louisiana.⁸

The synthetic control unit matches Louisiana closely in the pre-treatment years. In the two years following the introduction of the policy, it appears that there is a divergence between enrollment at large, public four-year institutions in Louisiana and large, public four-years in other states. However, for other institution types, there does not appear to be any meaningful difference between Louisiana's enrollment and the synthetic control enrollment. In Figure 6 I report estimates of the average treatment effect on the treated (ATT), the estimate of the difference between the observed enrollment in Louisiana and the synthetic counterfactual enrollment after the intervention, along with the 95% confidence interval. The point estimates are quite small and are not statistically significant, so I cannot rule out that these estimates are zero. There does not appear to be much evidence of substitution between public two-year and four-year schools in the aggregate.

As the policy may have differentially impacted students of color, I then test for potential heterogeneity in enrollments by race/ethnicity. Enrollment for Louisiana and the synthetic control unit is given in Figures 7-10.⁹ For white students, the synthetic control follows Louisiana's enrollment closely in the pre-treatment years. White student enrollment at public two-years is slightly above the synthetic control enrollment in the post-treatment years and enrollment in large public four-years is below the synthetic control enrollment in Fall 2019. For Black students, visual evidence suggests that Louisiana's enrollments have increased in four-year institutions, particularly large public four-years, and have decreased slightly in public two-years. However, the synthetic control does not match quite as well on public two-years in the pre-treatment years, and the difference between Louisiana and the synthetic unit does not appear to be outside of normal year-to-year deviations.

Point estimates from the synthetic control estimation are provided in Figures 11-14. For white, Hispanic/Latino, and Asian students, there is no evidence of enrollment changes due to the policy. The point estimates are small and not statistically significant; the estimates are not affected by the states included in the potential donor pool for the synthetic control. For Black students, I find suggestive evidence of substitution between public two-year schools and four-year schools. While I cannot rule

⁸ Figures provided in the Appendix

⁹ Additional figures for synthetic control estimation excluding neighboring states and SEC states are given in the appendix.

out that the effect is zero, public two-year enrollment seems to have fallen after the policy introduction and enrollment in four-year institutions appears to have increased. This is particularly plausible for large, public four-year institutions. The ATT at large public four-year institutions is 523 using all states as potential donors to the synthetic control and 689 restricting neighboring states and SEC states from the potential donors. The 95% confidence interval for the estimates obtained with the donor pool restricted is (-7, 1385) students, suggesting that the actual effect of the policy is likely positive.¹⁰ Thus, it is plausible that the FAFSA policy induced Black students to substitute away from community colleges towards larger, more selective four-year institutions.

4.2.2 Financial Aid Results

As the FAFSA submission policy may have impacted historically disadvantaged students who were previously deterred from filing a FAFSA, I also examine the effect on financial aid. Specifically, I use synthetic control to estimate the impact of Louisiana's policy on the total amount of Pell Grants awarded to FTF undergraduate students. I use the total Pell Grant amount awarded because using the percentage of students enrolled who have Pell Grants is potentially problematic. If the policy impacted enrollment and it also impacted the number of students on Pell Grants, both the numerator and the denominator in that statistic is moving, thus not giving us a good measure of how the policy impacted Pell Grants alone.

The total amount of Pell Grant dollars disbursed to students in Louisiana increased by just under \$7 million from 2017 to 2018. An increase in Pell Grant awards in Louisiana does not necessarily mean that the FAFSA policy had a causal effect on the amount of financial aid disbursed. We need to compare Pell Grant awards in Louisiana to Pell Grant awards in a suitable control group, before and after the policy change. Thus, I again use the synthetic method to estimate the causal impact of the FAFSA policy on total Pell Grant dollars awarded. In Figure 15 I plot the total dollar amount of Pell Grants at all institutions in Louisiana and its synthetic control.¹¹ In 2018, there is a small divergence in Louisiana's Pell Grant awards from the synthetic control unit, suggesting that there may have been some increase in Pell Grants due to the FAFSA mandate.

I examine Pell Grant aid by tuition as the FAFSA policy may have induced students who were

¹⁰ The 90% confidence interval for enrollment at large public four-years obtained from the synthetic control estimated on same sample of potential donors is (105, 1273), suggesting that this estimate is marginally significant.

¹¹ Additional figures are provided in the appendix.

previously uninformed about the price of college to attend different types of institutions after learning about Pell Grant eligibility. Pell Grant eligibility may have induced students to attend more expensive institutions, so I begin by restricting the sample to schools above 90th percentile for tuition and fees in a given state and year. This gives a total of 415 schools, of which 404 are private four-year, ten are private two-year and one public four-year. The average tuition at these institutions was \$42,572 for the 2018-2019 academic year. I also restrict the sample to public four-years and examine higher-cost public four-year institutions, in the 90th percentile or higher for tuition, separately from other public four-years. I also consider Pell Grant awards at all public two-year institutions, as we could imagine that students who are eligible for a Pell Grant may be more likely to use their financial aid at a community college. Visualizations of Pell Grants by tuition in Louisiana and the synthetic counterpart are given in Figure 16. The synthetic control unit does not match well for several of the models, with the exception of lower-cost public four-years displayed in Panel C. Here, we can see a small increase in Louisiana Pell Grant dollars relative to the synthetic control, similar to the small increase displayed in Figure 15.

The point estimates and 95% confidence intervals obtained from the synthetic control method are presented in Figure 17. Lower-cost public four-year and public two-year schools have a positive point estimate. It is possible that the FAFSA mandate informed students—who would have otherwise not completed a FAFSA—about Pell Grant eligibility but did not change their college enrollment plans, thus increasing Pell Grant awards at lower-cost institutions. However, the standard errors on these estimates are large and I cannot rule out that the effect of Louisiana’s policy on Pell Grant awards at lower-cost institutions is zero. The more expensive institutions have small point estimates and are also not significant, suggesting that the policy did not have an effect on the total amount of Pell Grant awards disbursed at these institutions.

5 Conclusion

Starting in the 2017-2018 academic year, Louisiana has required high school students to submit a FAFSA application, or opt-out, prior to high school graduation. The state has since garnered support as a pioneer in its attempt to increase the number of students submitting a financial aid application. In this paper, I provide early evidence on whether Louisiana’s policy to require FAFSA submission prior to high school graduation translates into increased college enrollments. Using a Generalized Synthetic

Control approach, I find suggestive evidence that this policy may have led to a substitution between four-year schools and public two-year schools—particularly for Black students, where I find marginally significant effects on enrollment at large, public four-year institutions. However, enrollment estimates for other races/ethnicities are small and I cannot rule out that the effect is zero. I also find little evidence that Pell Grant awards increased due to the policy change. This makes sense conceptually, as the FAFSA mandate likely only affected students who were on the margin of enrolling college or students who would otherwise not have filed a FAFSA form. Louisiana's policy is likely to increase the probability of attendance among these marginal students, especially those for who are most influenced by the cost of college attendance.

It is still too early to declare Louisiana's FAFSA policy a success and more research is needed to determine the effect that mandatory FAFSA submission policies have on college enrollment. Encouragingly, FAFSA submission rates have increased since the policy introduction but perhaps less encouraging is that the policy failed to close the gap in submissions between high-share minority and low-share minority schools or between high-income and low-income schools. The results of this paper also indicate that the policy did not have much effect on FTF enrollment at the state-level, suggesting that more efforts may be needed to encourage students to complete a financial aid application and enroll in college. It is likely that allowing schools time to adjust to the policy change, especially under-resourced and under-staffed schools, may increase their effectiveness at helping students file a FAFSA and prepare for college enrollment. Thus, it would be helpful to study the effects of Louisiana's policy on enrollment using a longer post-treatment period. Unfortunately, the period in which these policies have been implemented now overlaps with the Covid-19 pandemic and the resulting changes colleges and universities have faced. This makes studying long-term effects of the FAFSA policy in Louisiana difficult. It also complicates the policies implemented recently in Texas and Illinois, as the policy introduction in these states directly overlap with the Covid-19 pandemic.

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Figure 1: Mandatory FAFSA Legislation by State

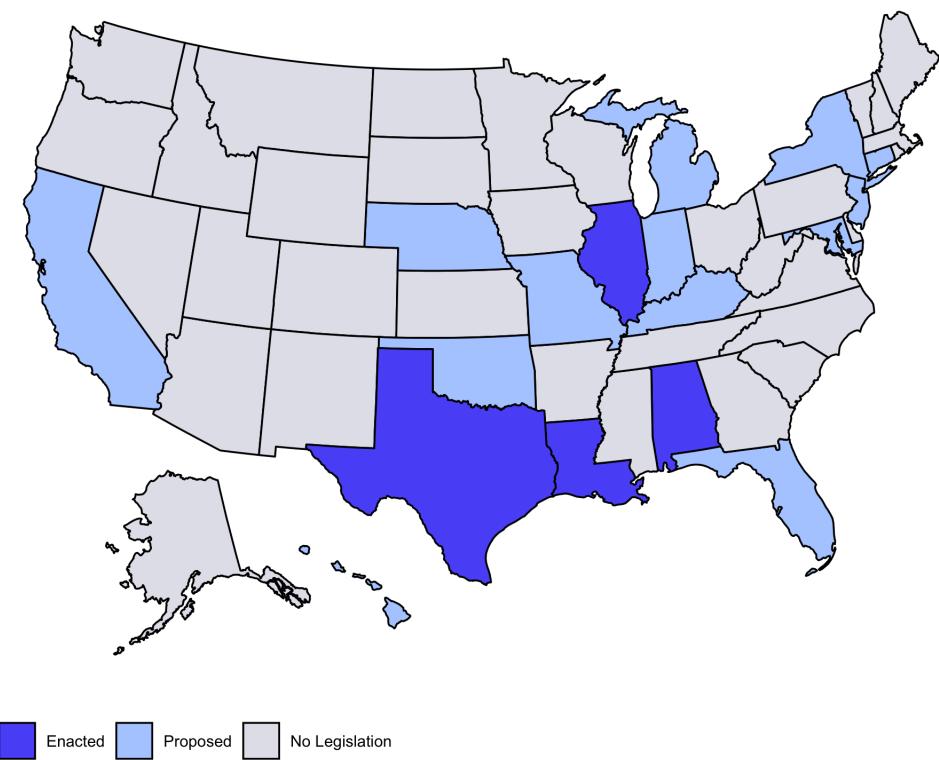


Figure 2

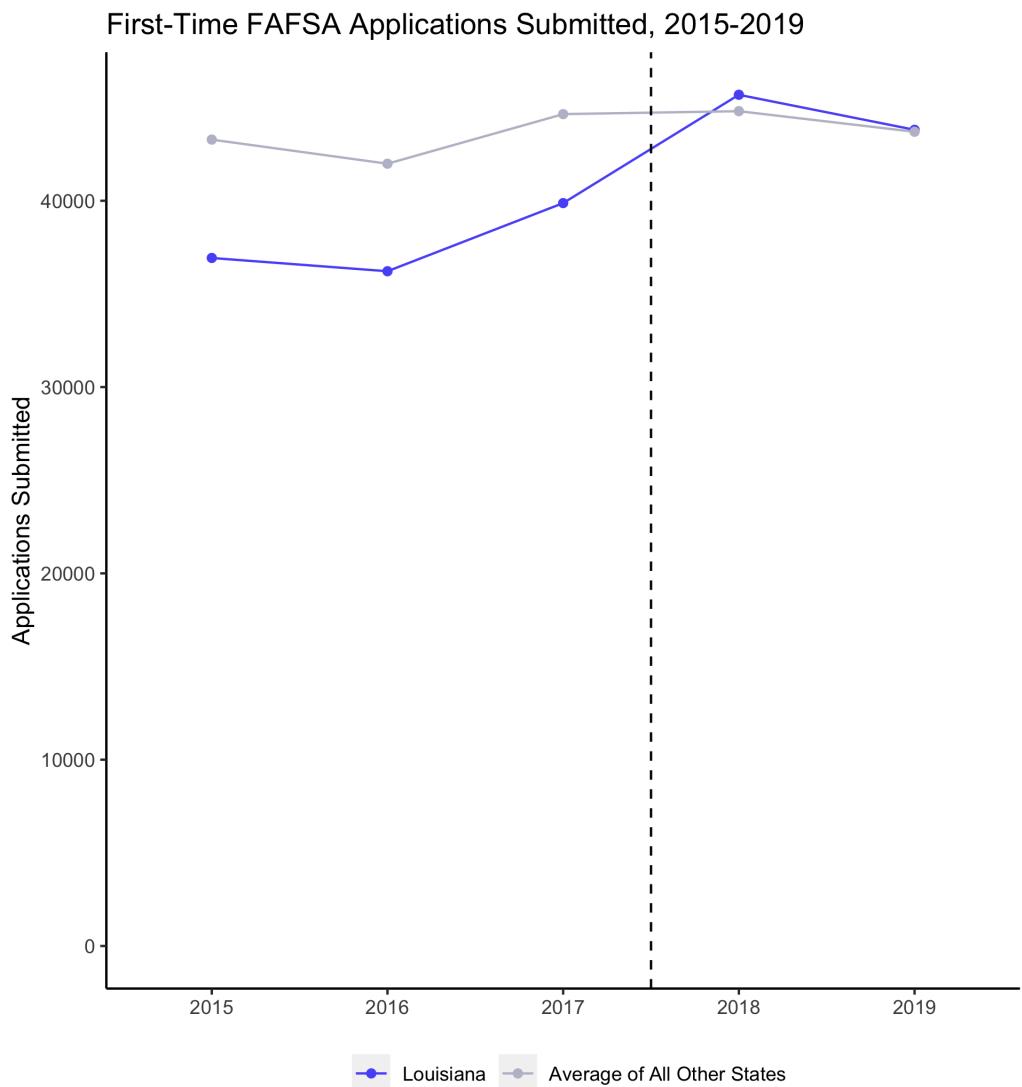


Figure 3: FAFSA Submission by Share of Minority Students and Low-Income Students

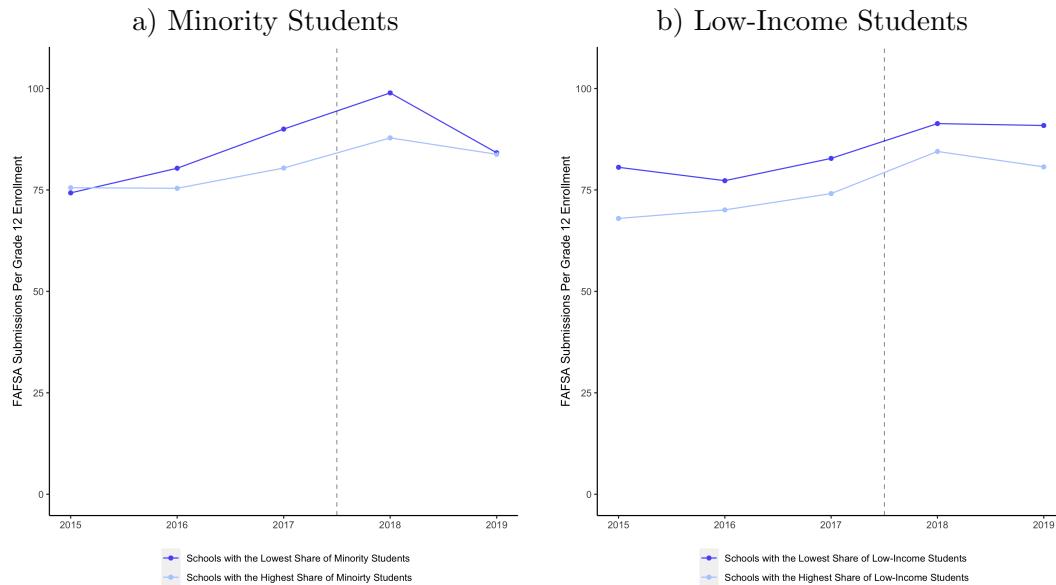


Figure 4: First-Time Fall Enrollment in Louisiana and Other States

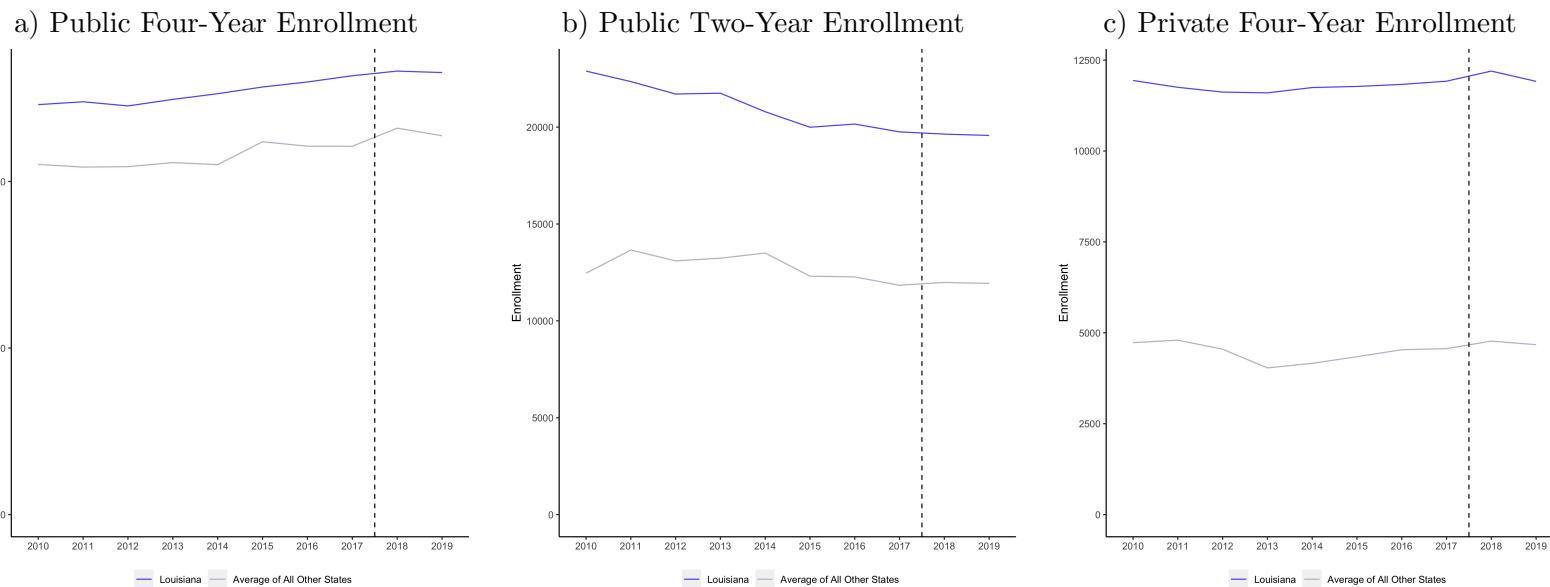


Figure 5: Post-Secondary Enrollment in Louisiana, by Institution Type

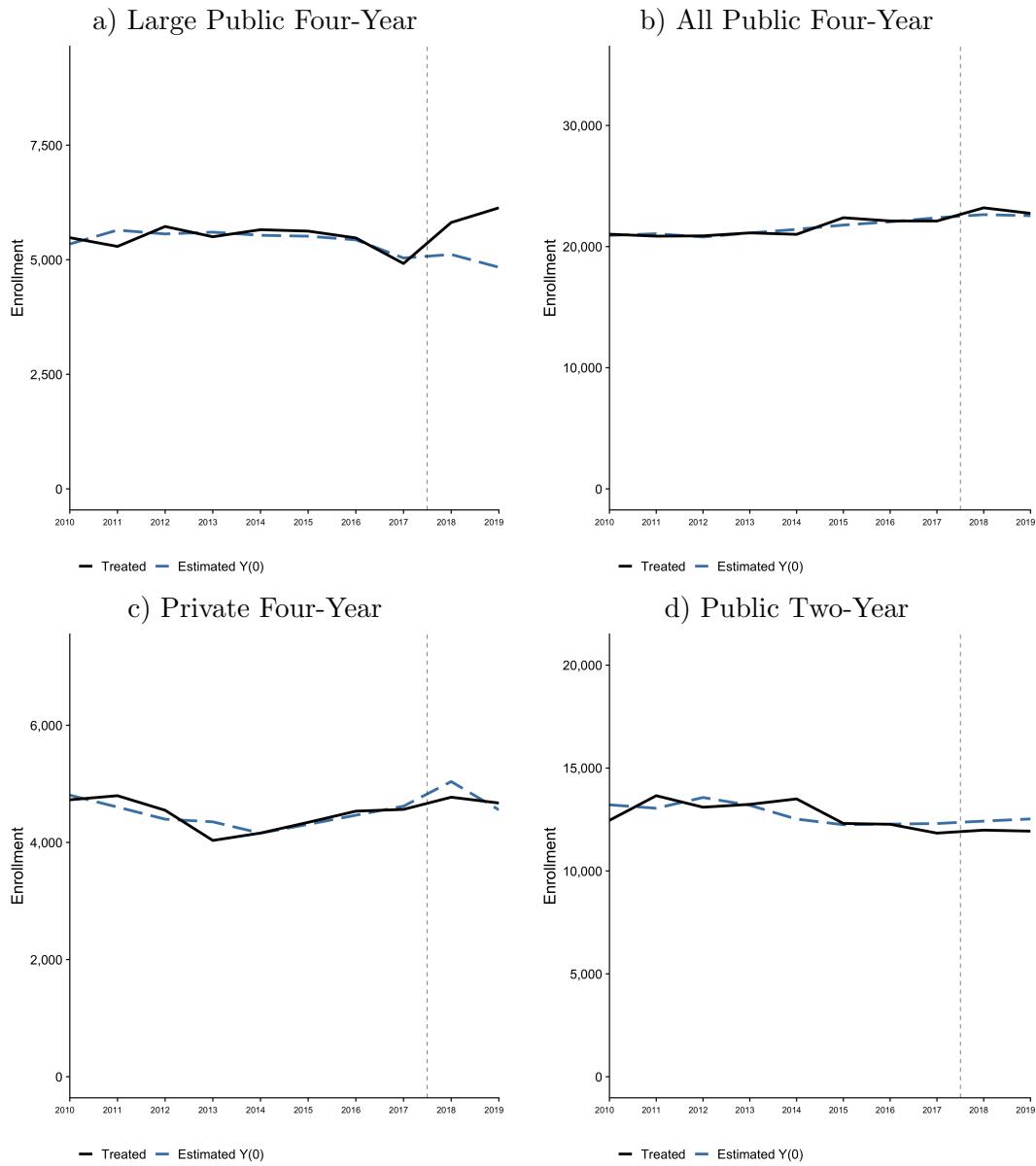
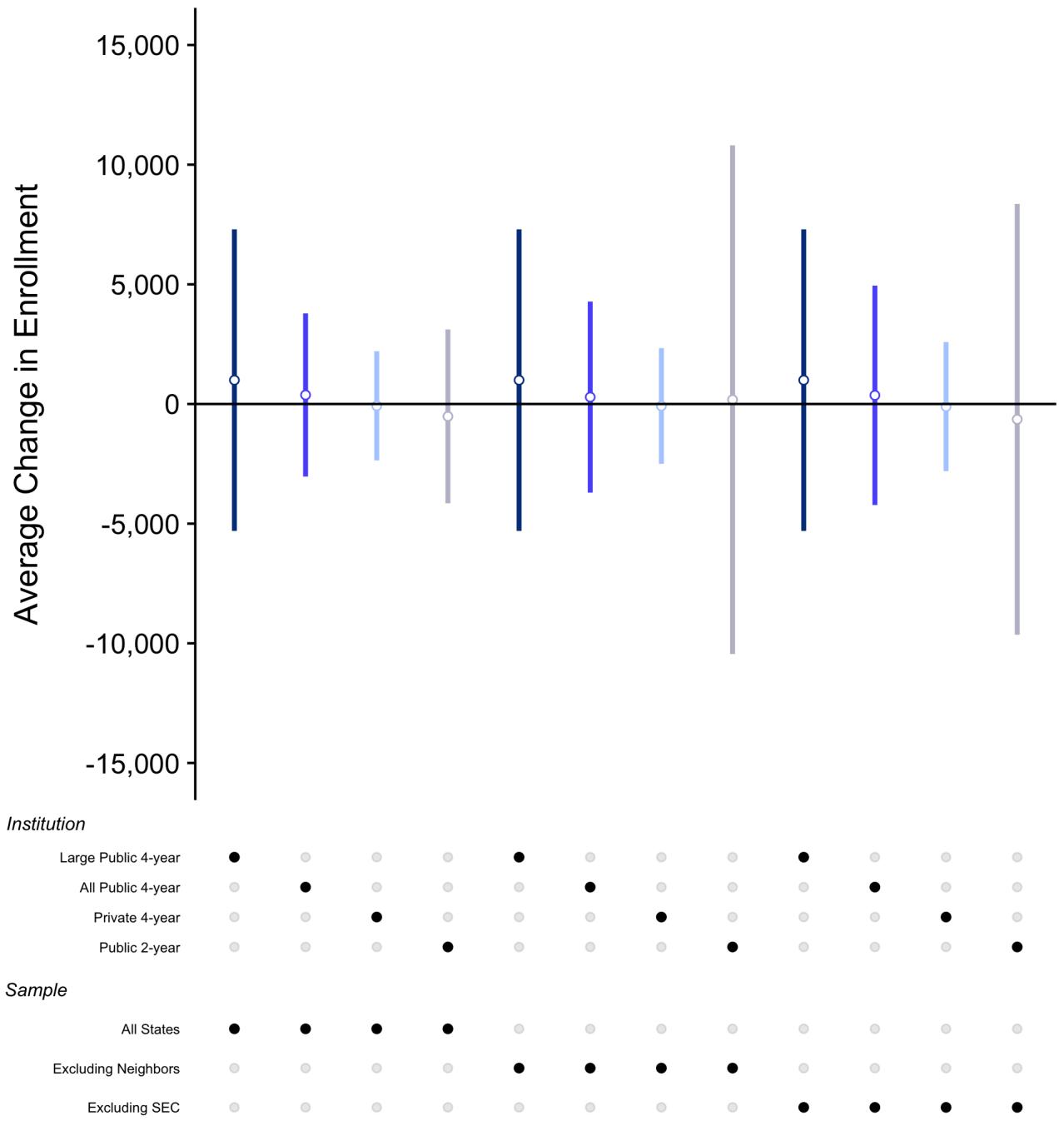


Figure 6: The Effect of Mandatory FAFSA Legislation on Enrollment, by Institution Type



Notes: This figure provides point estimates and the 95% confidence interval to the synthetic control estimates for FTF enrollment by institution type. The synthetic control matches on pre-treatment outcomes only. Confidence intervals are computed using bootstrapped standard errors with 5000 iterations. Synthetic control estimation was done using the gsynth package in R.

Figure 7: Enrollment for White Students in Louisiana, by Institution Type

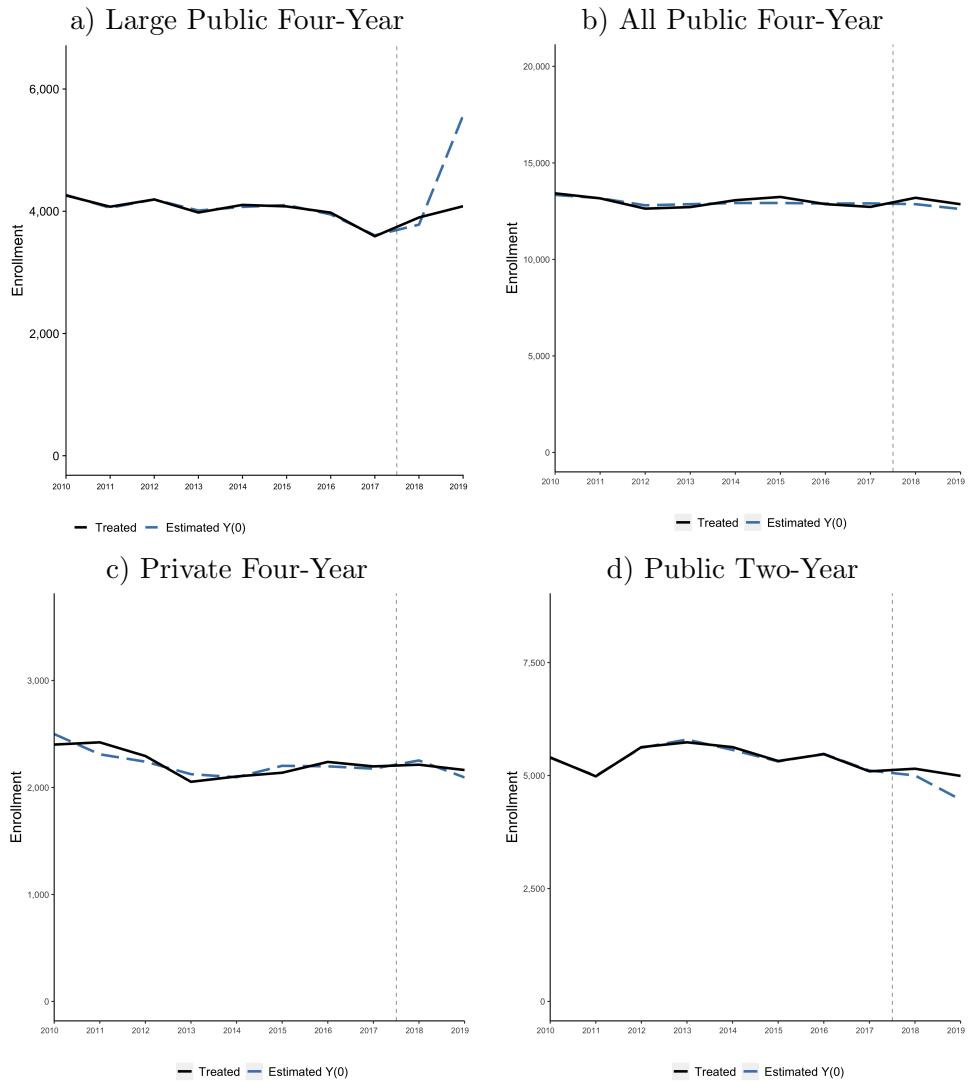


Figure 8: Enrollment for Black Students in Louisiana, by Institution Type

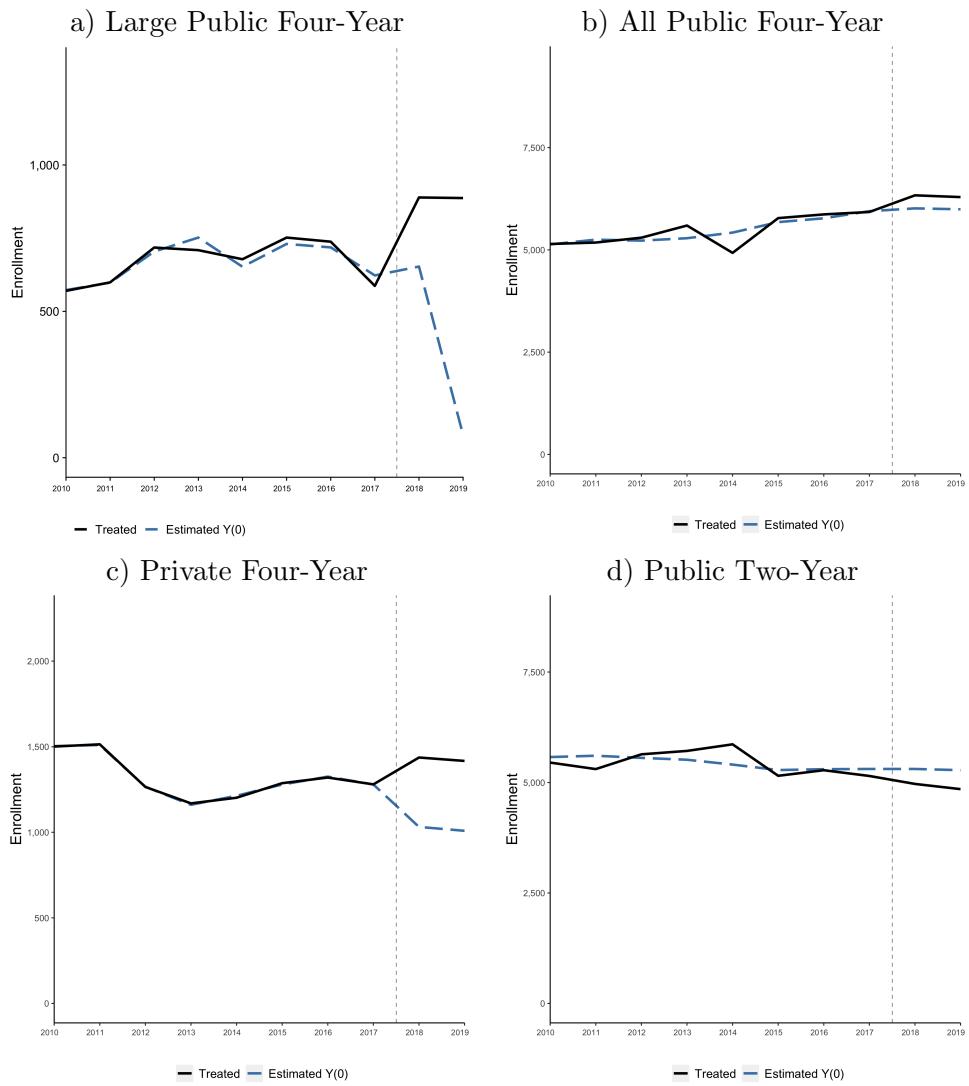


Figure 9: Enrollment for Hispanic Students in Louisiana, by Institution Type

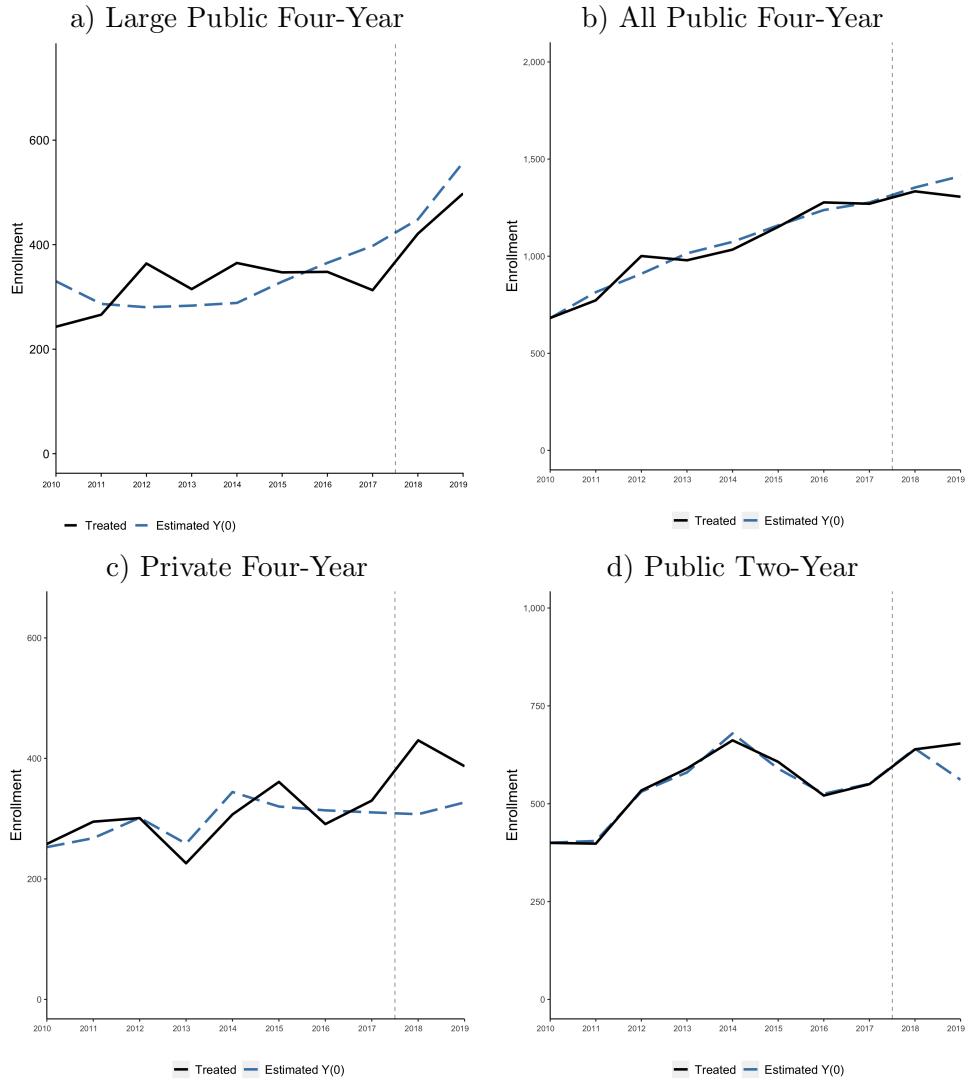


Figure 10: Enrollment for Asian Students in Louisiana, by Institution Type

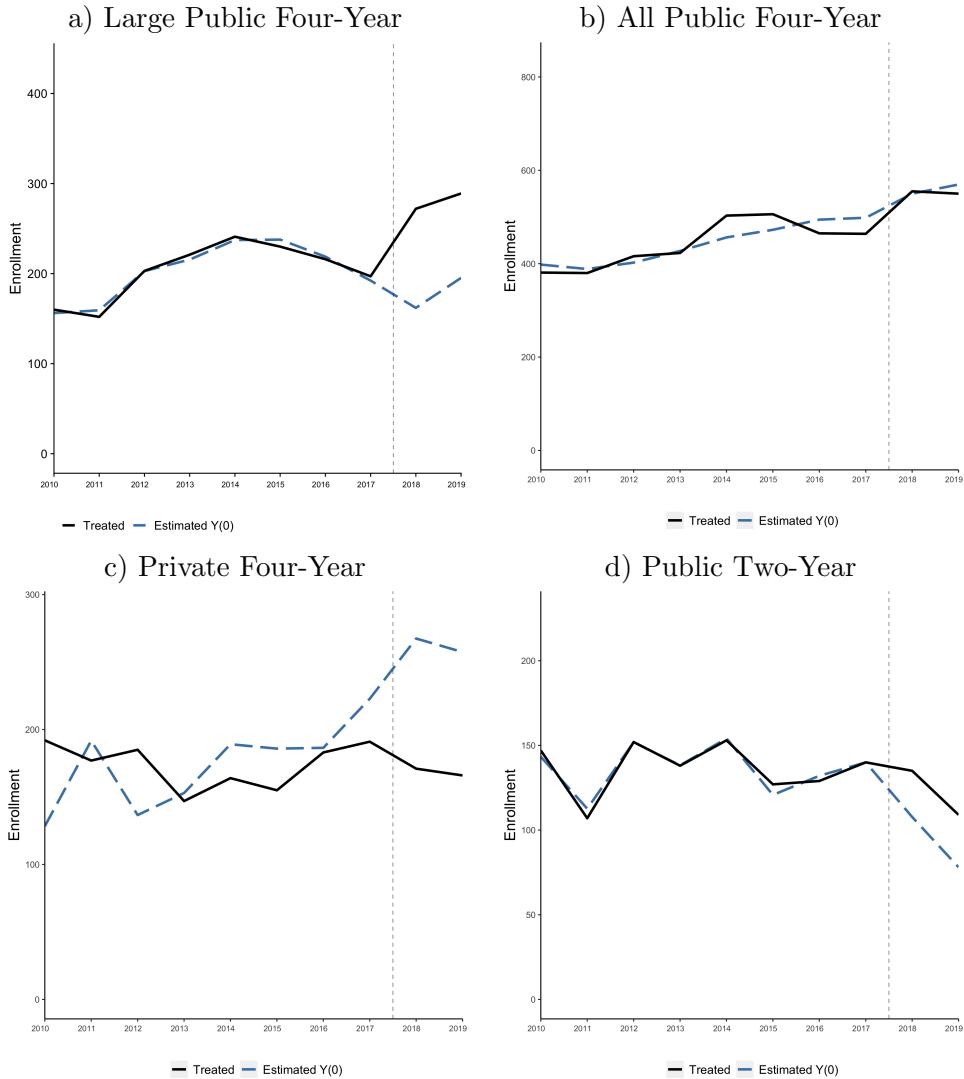
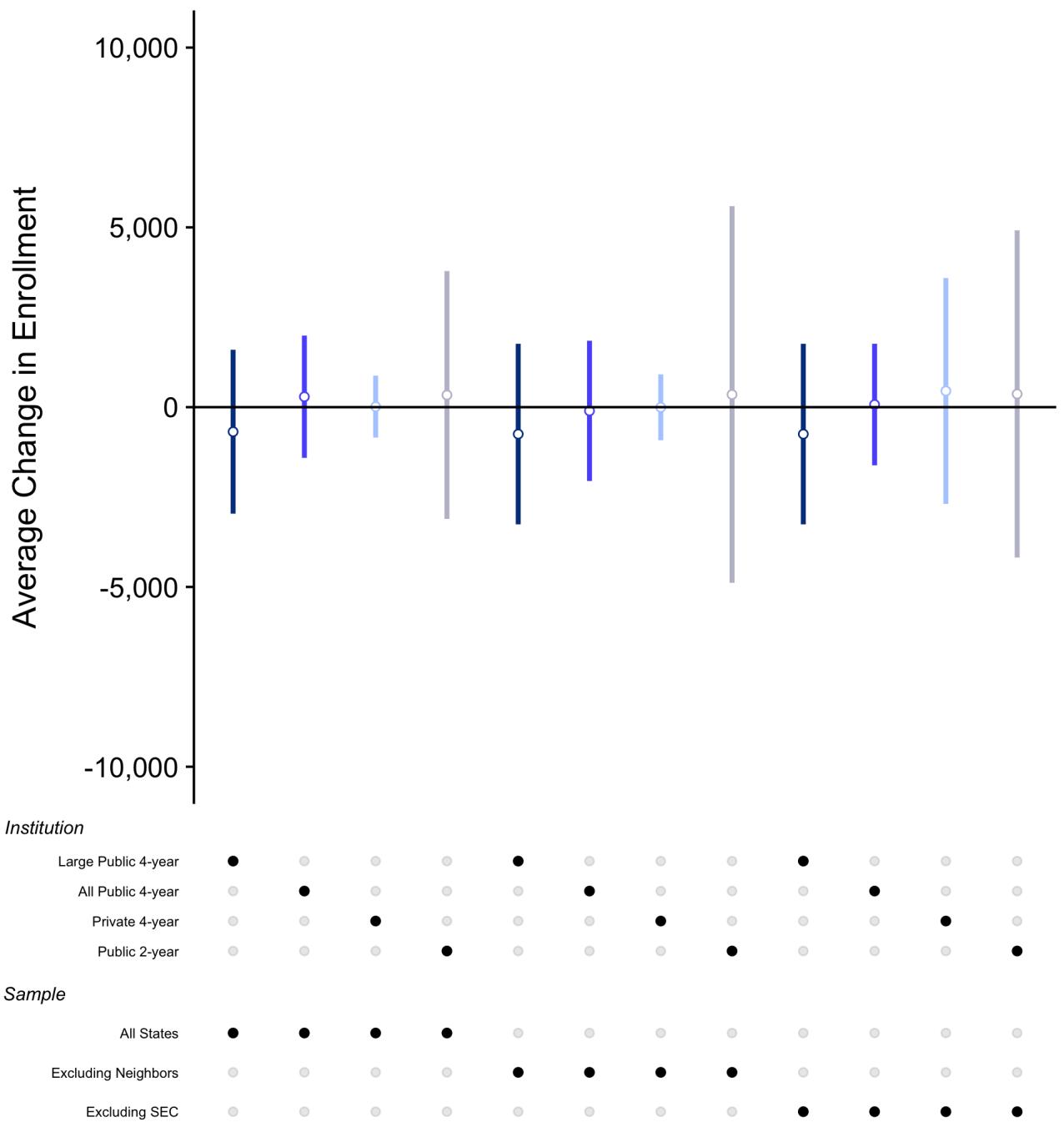
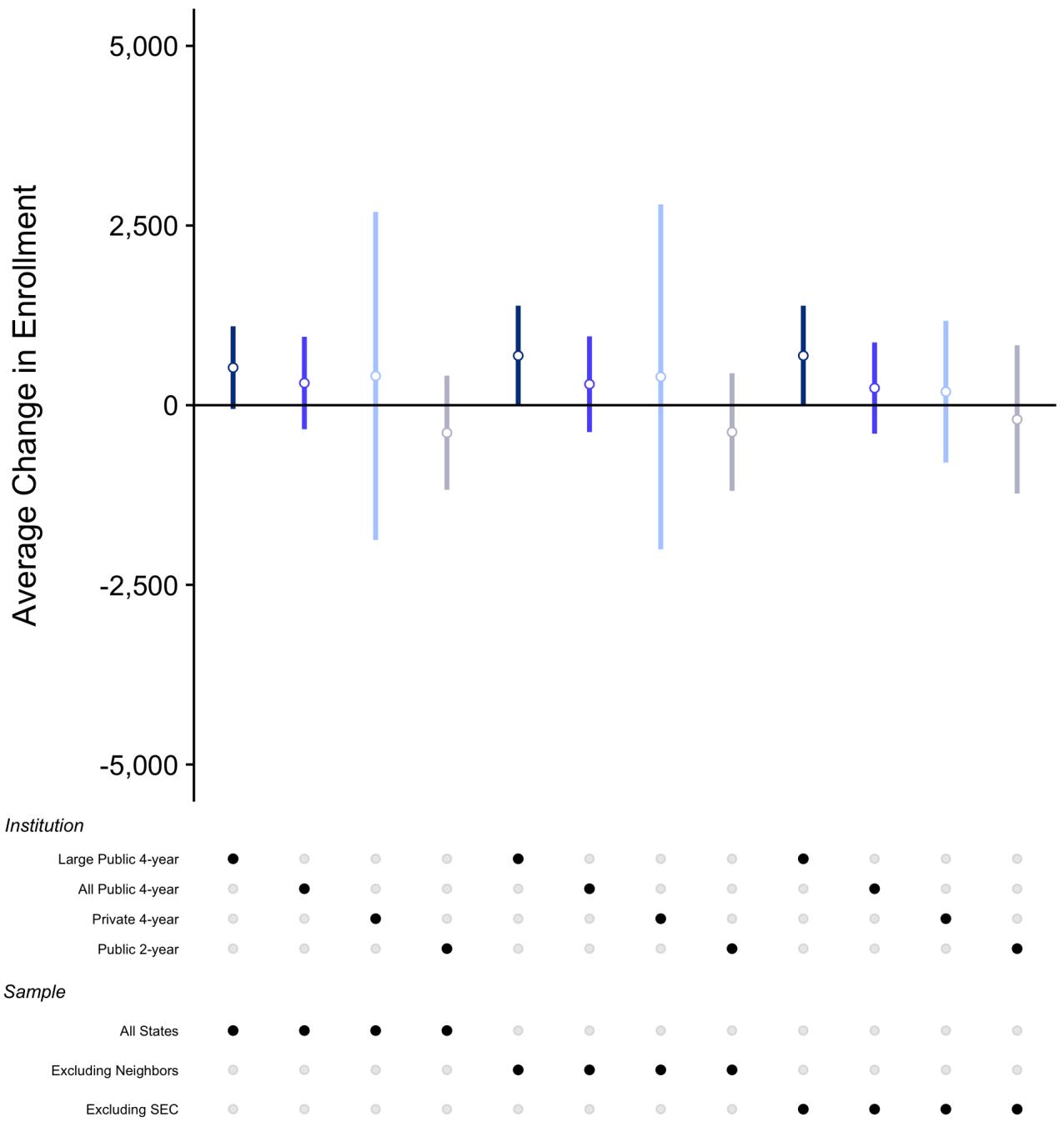


Figure 11: The Effect of Mandatory FAFSA Legislation on White Student Enrollment, by Institution Type



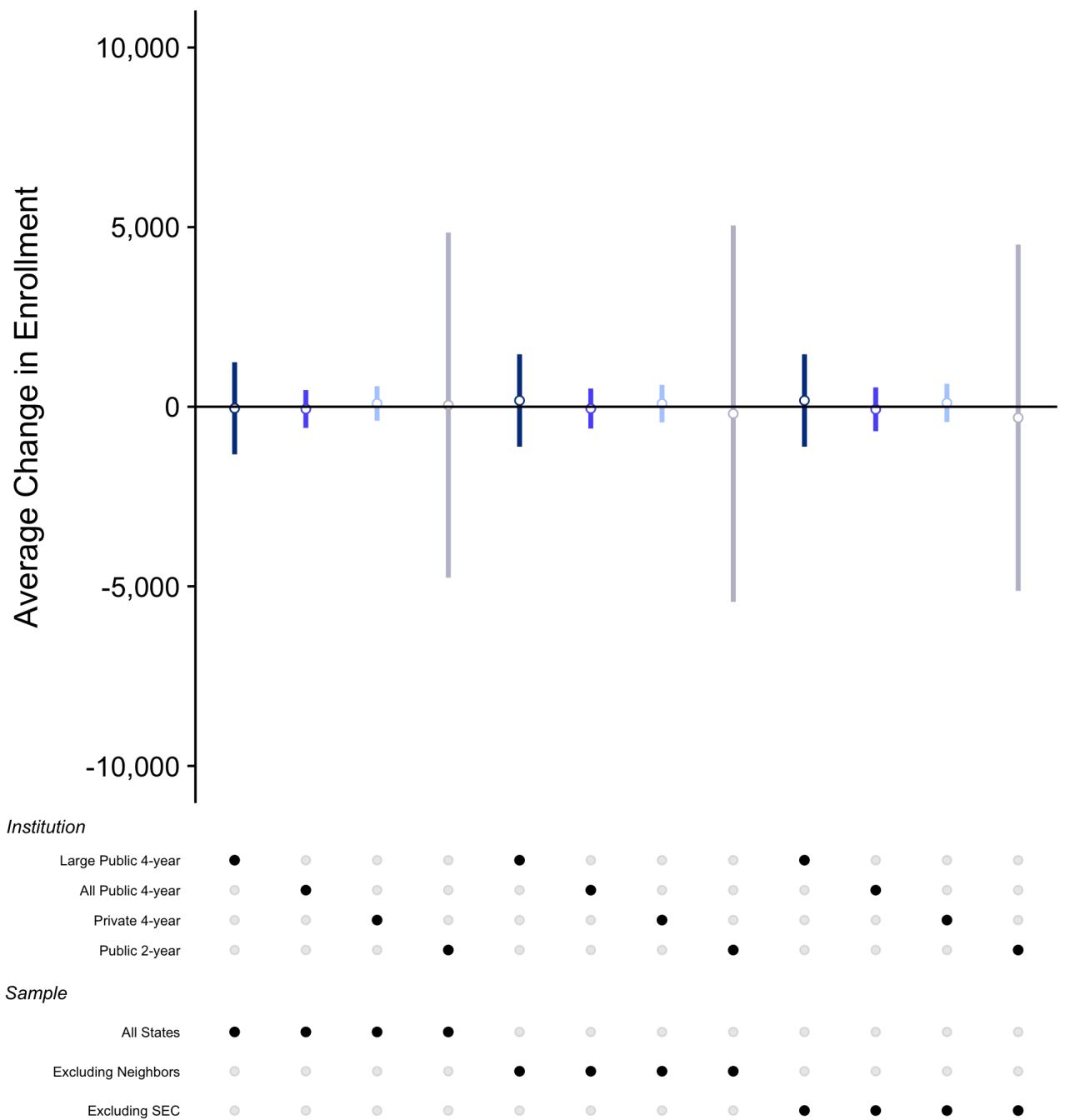
Notes: This figure provides point estimates and the 95% confidence interval to the synthetic control estimates for FTF enrollment for white students by institution type. The synthetic control matches on pre-treatment outcomes only. Confidence intervals are computed using bootstrapped standard errors with 5000 iterations. Synthetic control estimation was done using the gsynth package in R.

Figure 12: The Effect of Mandatory FAFSA Legislation on Black Student Enrollment, by Institution Type



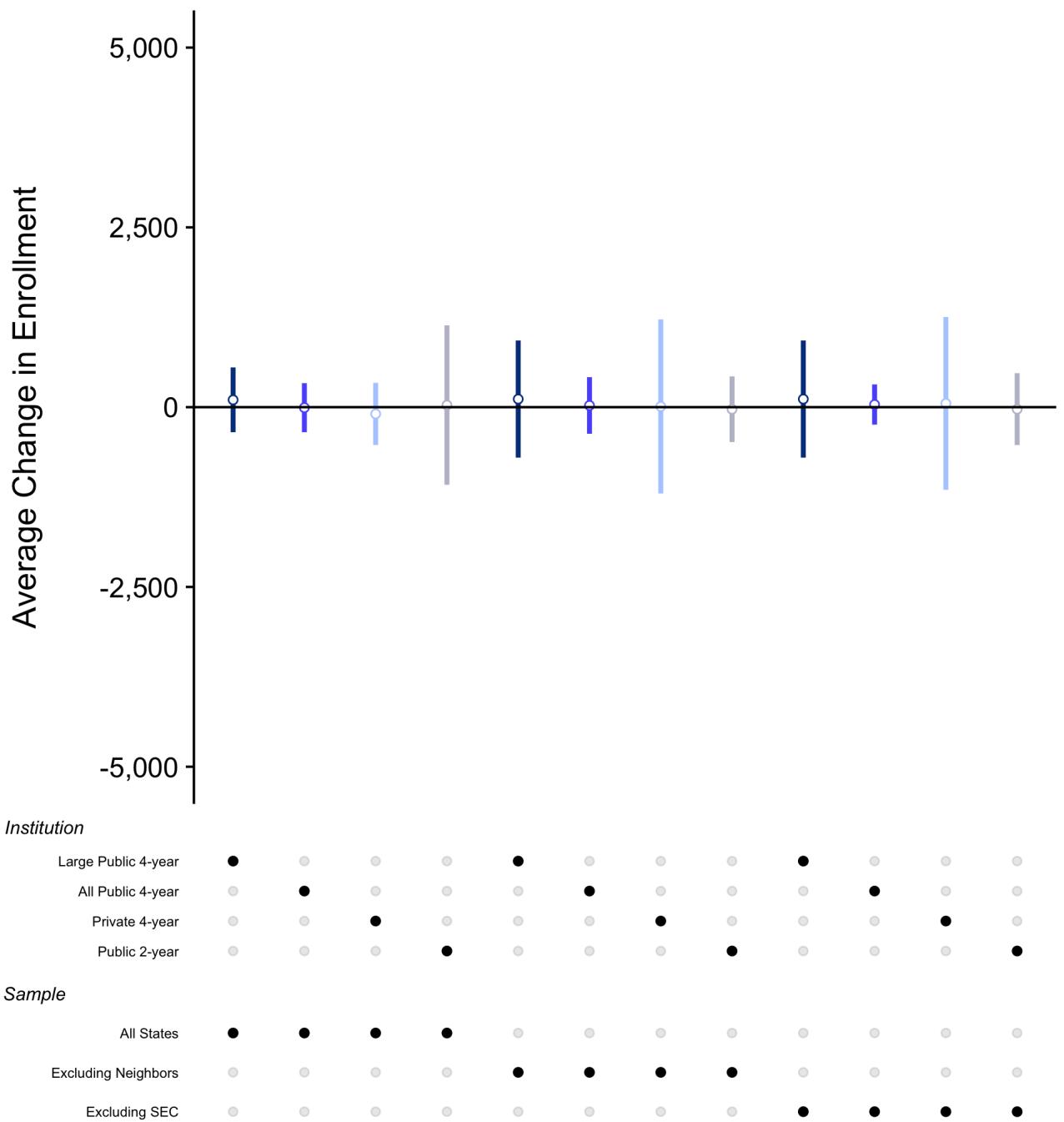
Notes: This figure provides point estimates and the 95% confidence interval to the synthetic control estimates for FTF enrollment for Black students by institution type. The synthetic control matches on pre-treatment outcomes only. Confidence intervals are computed using bootstrapped standard errors with 5000 iterations. Synthetic control estimation was done using the gsynth package in R.

Figure 13: The Effect of Mandatory FAFSA Legislation on Hispanic Student Enrollment, by Institution Type



Notes: This figure provides point estimates and the 95% confidence interval to the synthetic control estimates for FTF enrollment for Hispanic/Latino students by institution type. The synthetic control matches on pre-treatment outcomes only. Confidence intervals are computed using bootstrapped standard errors with 5000 iterations. Synthetic control estimation was done using the gsynth package in R.

Figure 14: The Effect of Mandatory FAFSA Legislation on Asian Student Enrollment, by Institution Type



Notes: This figure provides point estimates and the 95% confidence interval to the synthetic control estimates for FTF enrollment for Asian students by institution type. The synthetic control matches on pre-treatment outcomes only. Confidence intervals are computed using bootstrapped standard errors with 5000 iterations. Synthetic control estimation was done using the gsynth package in R.

Figure 15: Total Pell Grant Awards for Louisiana

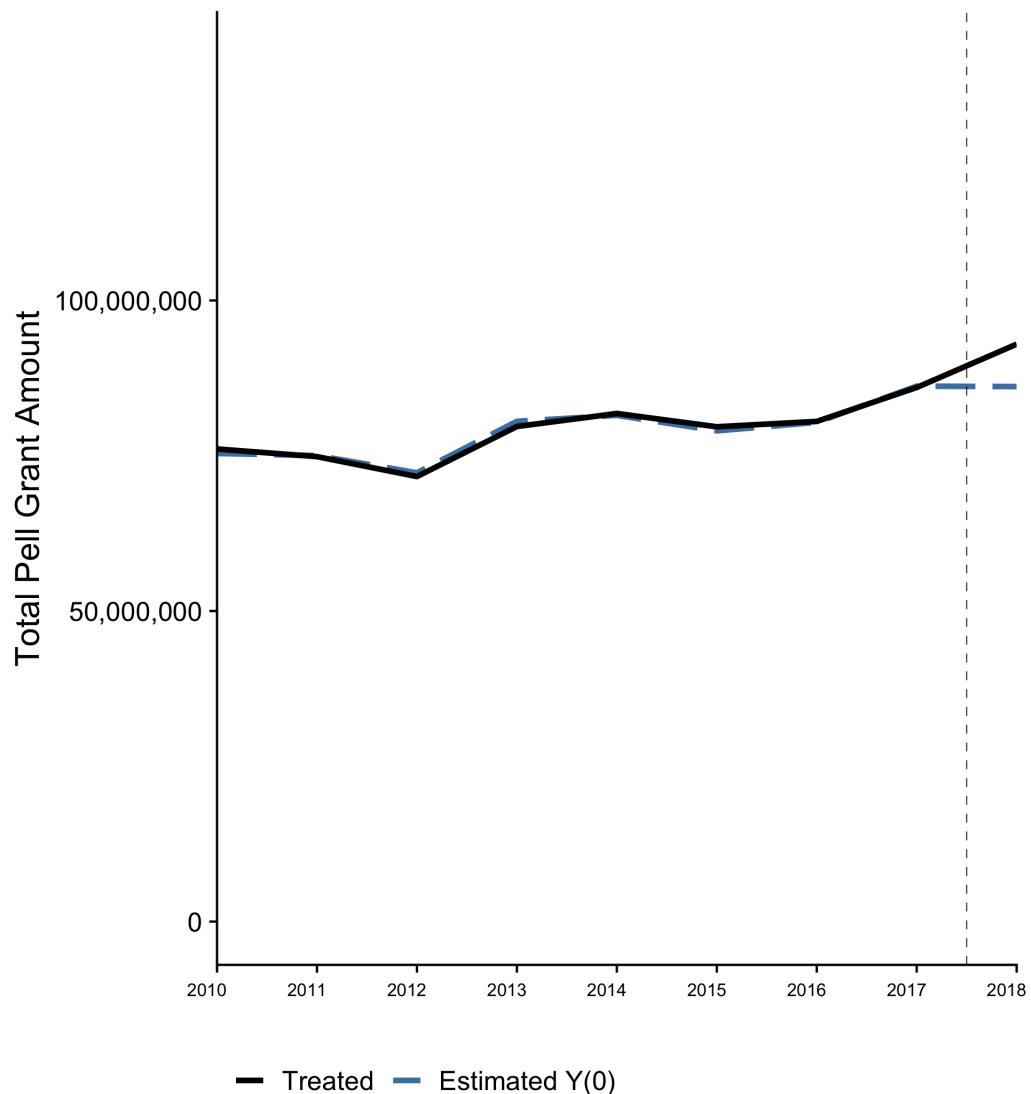


Figure 16: Total Pell Grant Awards for Louisiana by Tuition

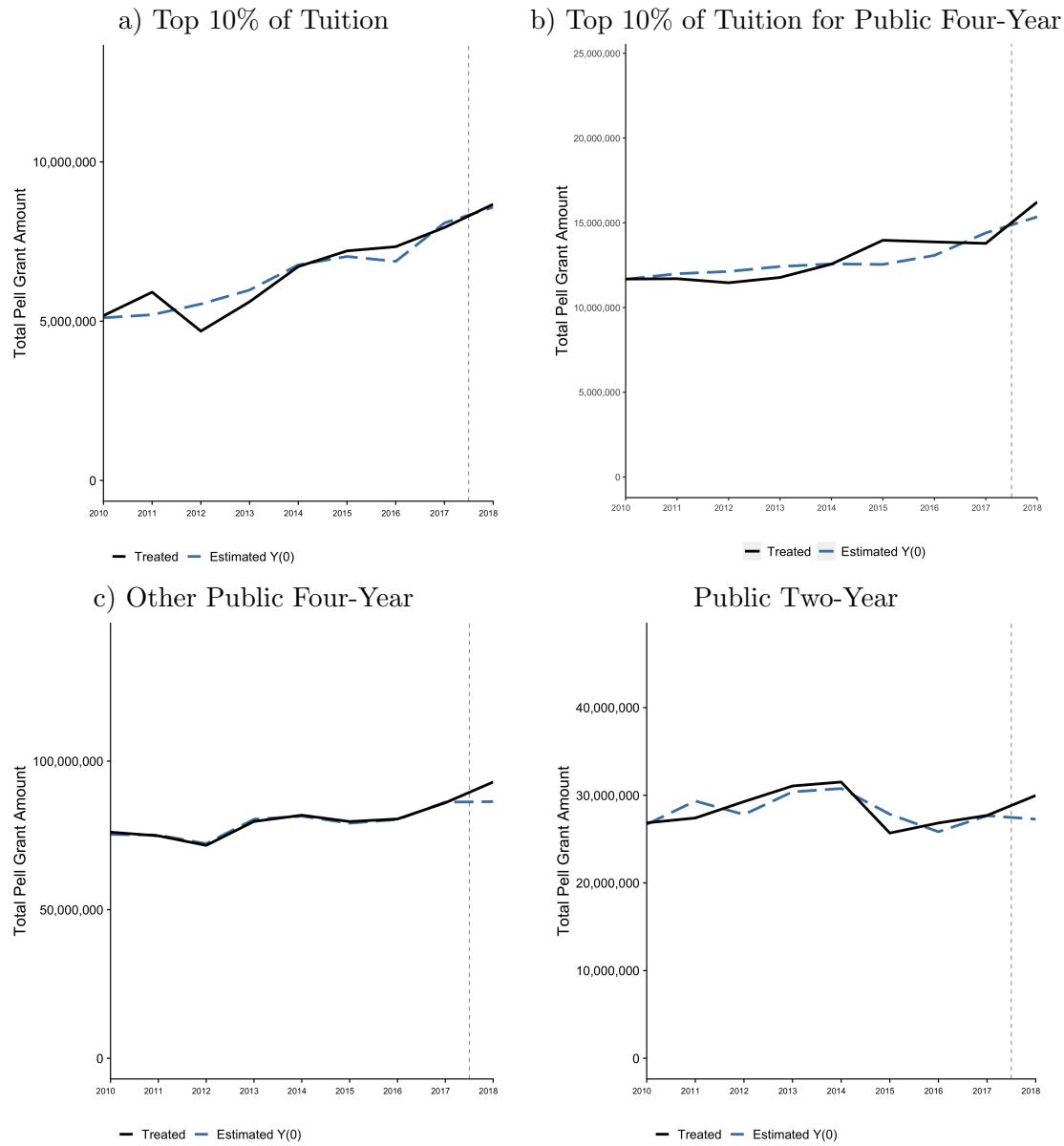
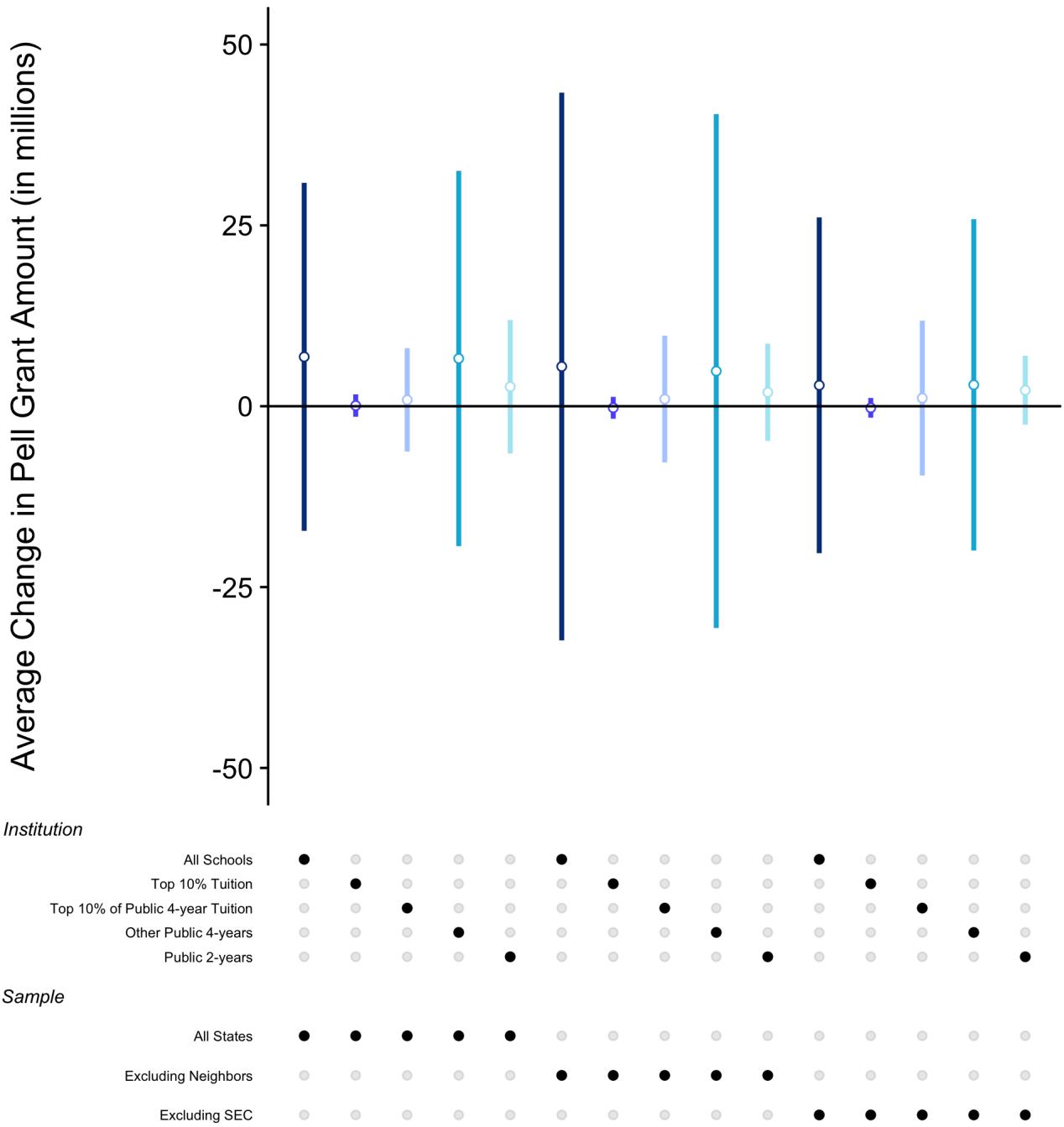


Figure 17: The Effect of Mandatory FAFSA Legislation on Pell Grant Awards, by Tuition



Notes: This figure provides point estimates and the 95% confidence interval to the synthetic control estimates for the total amount of Pell Grant dollars awarded, separated by tuition. The synthetic control matches on pre-treatment outcomes only. Confidence intervals are computed using bootstrapped standard errors with 5000 iterations. Synthetic control estimation was done using the gsynth package in R.

A : Enrollment by Race/Ethnicity

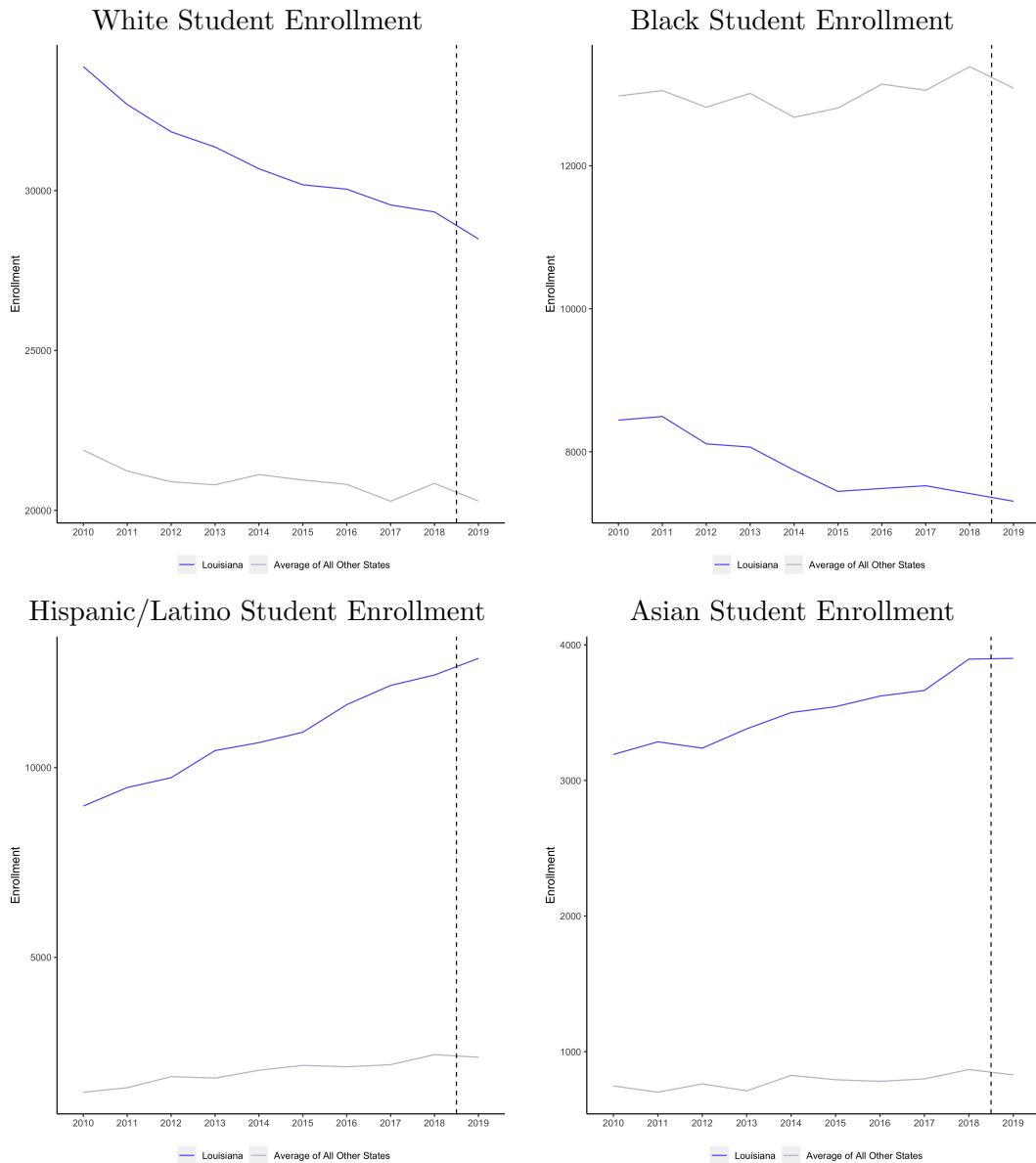
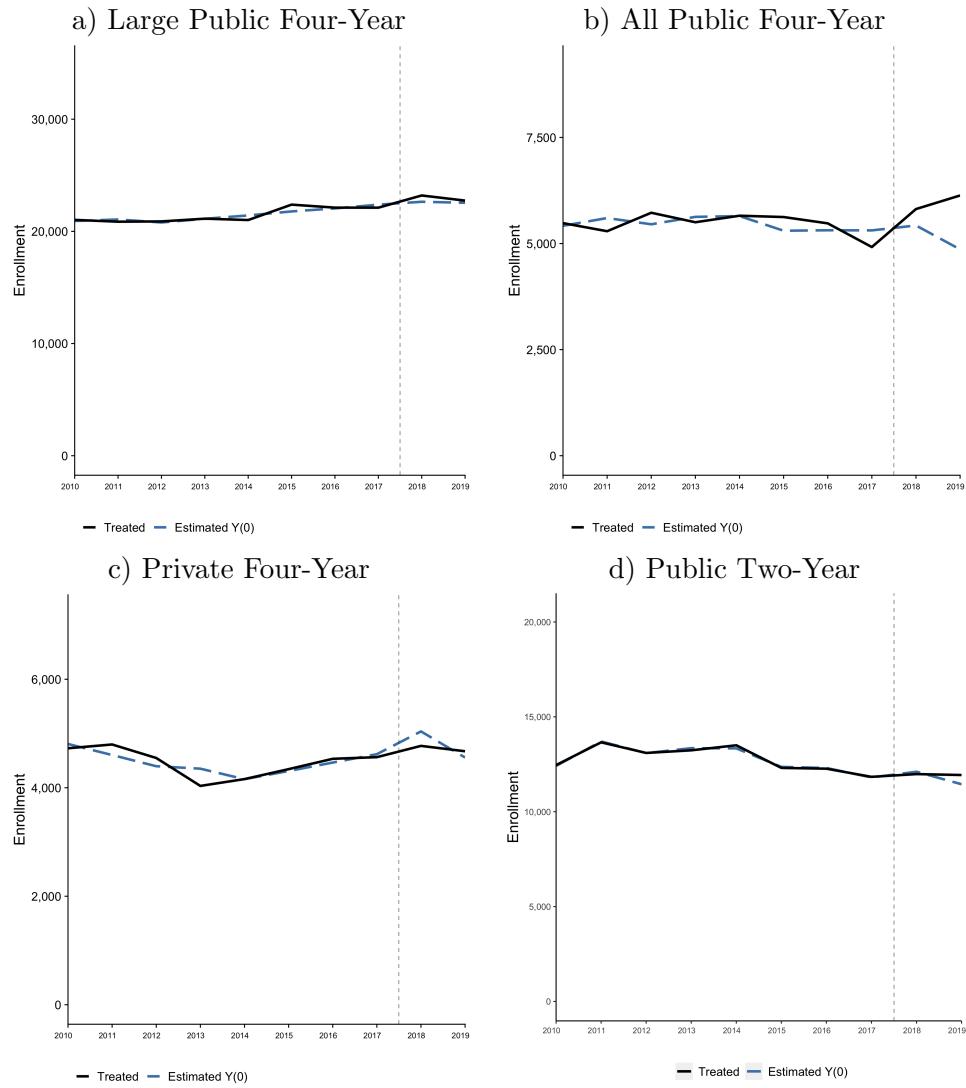


Figure 18: Post-Secondary Enrollment in Louisiana - Excluding Neighboring States



B : Additional Synthetic Control Figures

Figure 19: Post-Secondary Enrollment in Louisiana - Excluding SEC States

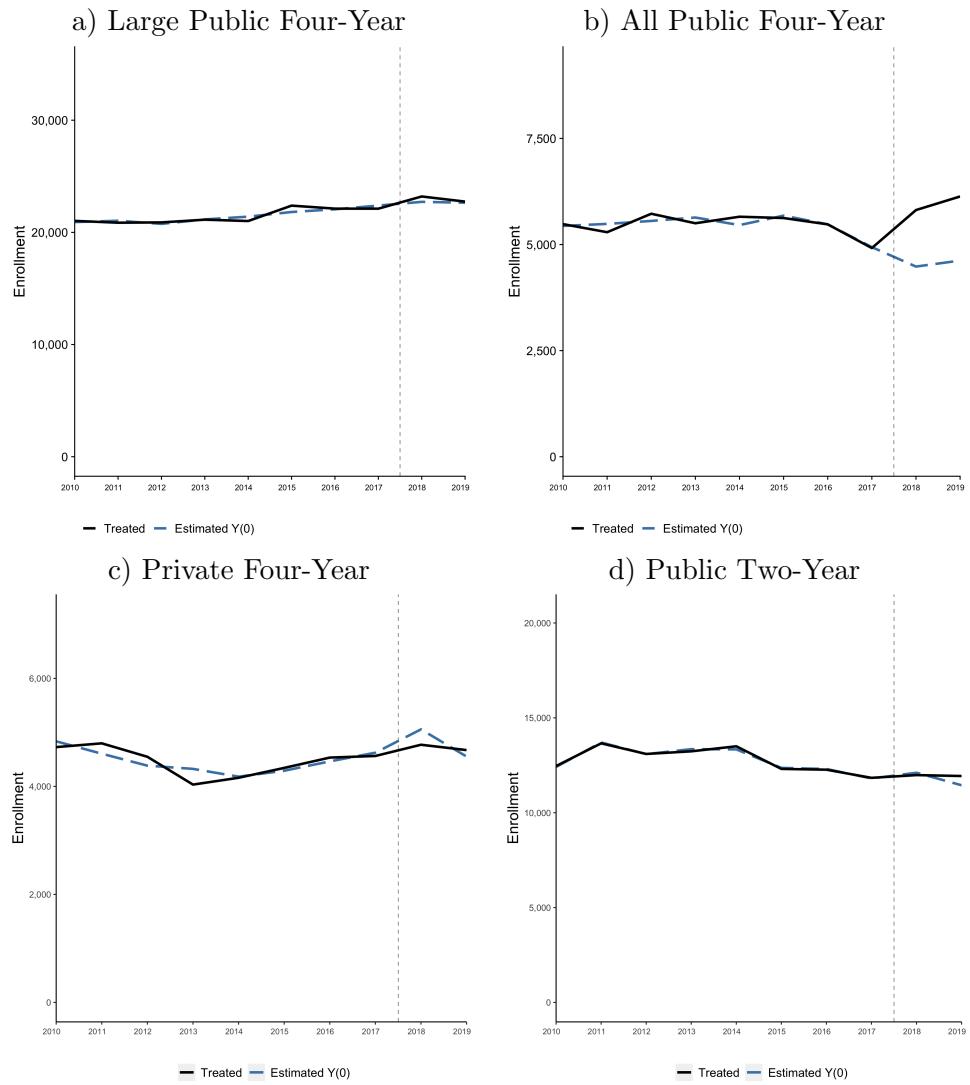


Figure 20: White Student Enrollment in Louisiana - Excluding Neighboring States

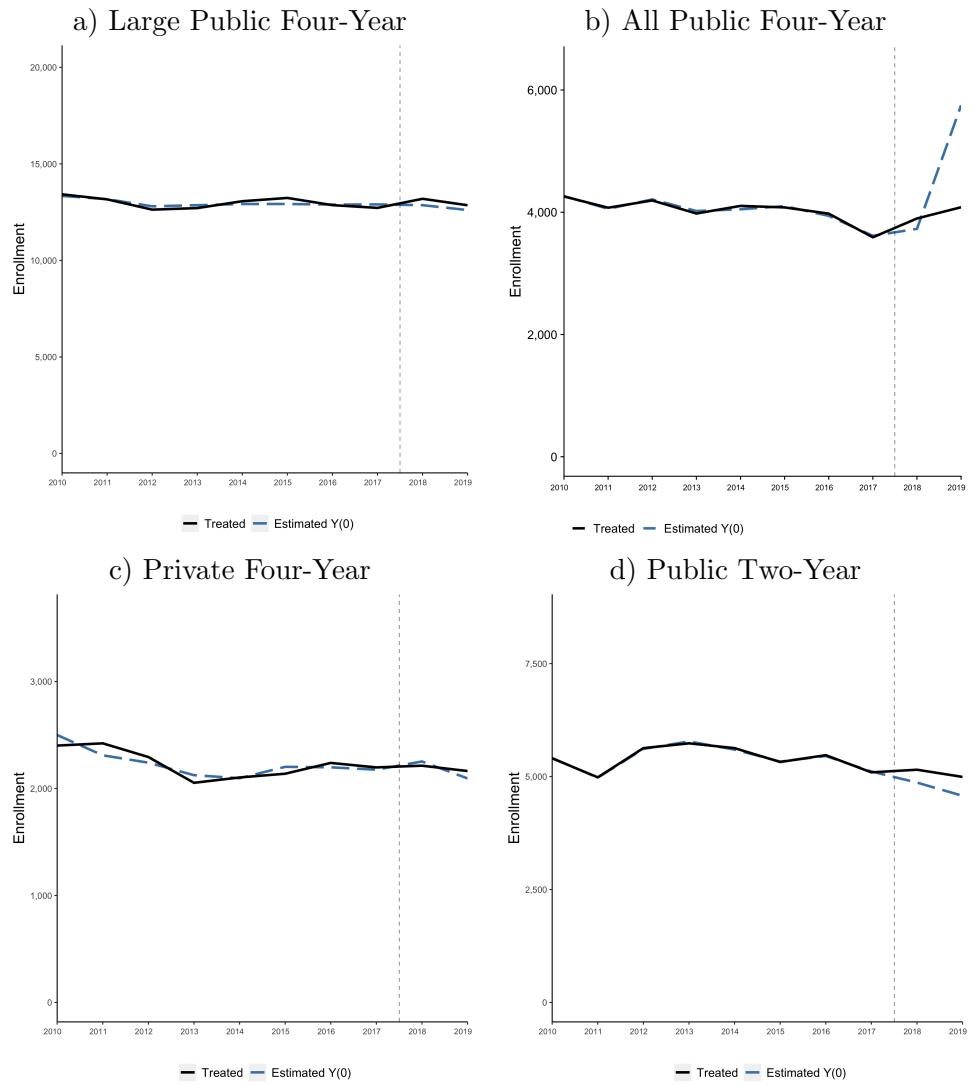


Figure 21: White Student Enrollment in Louisiana - Excluding SEC States

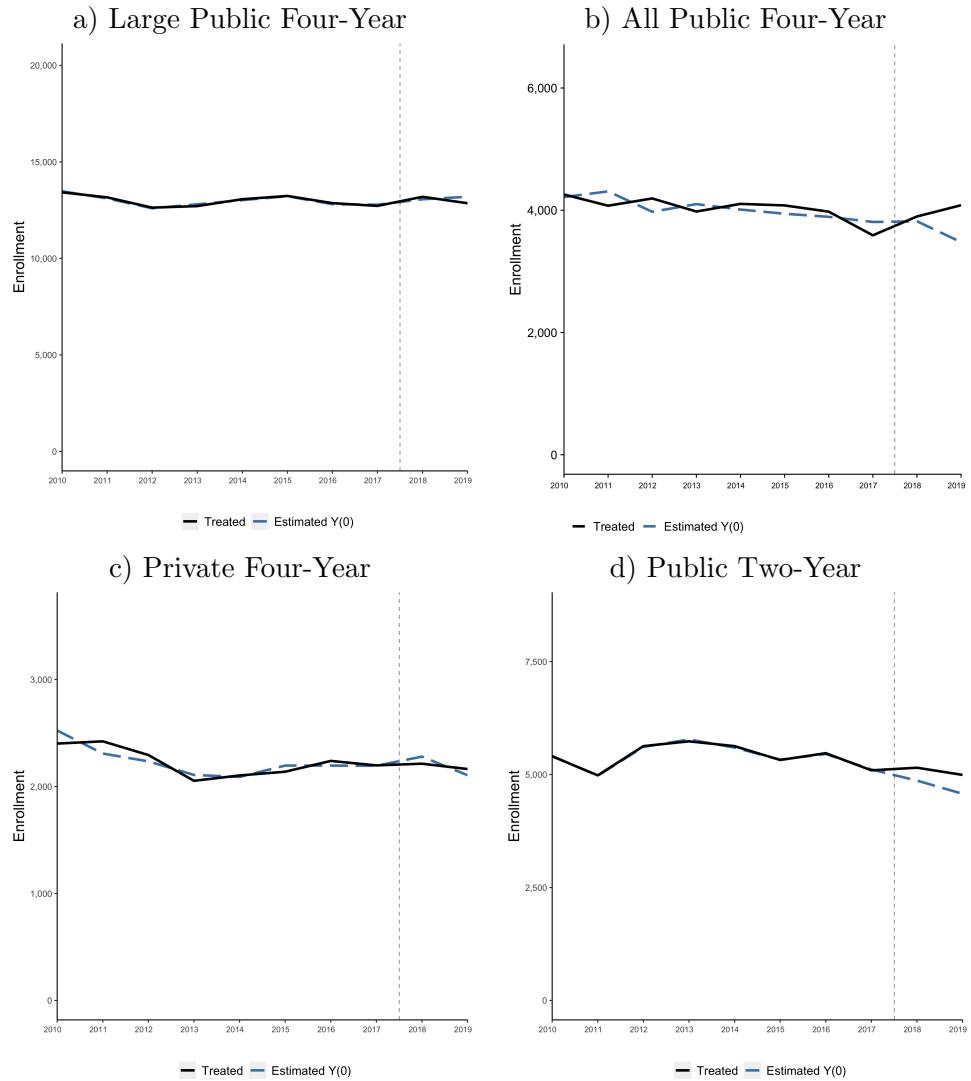


Figure 22: Black Student Enrollment in Louisiana - Excluding Neighboring States

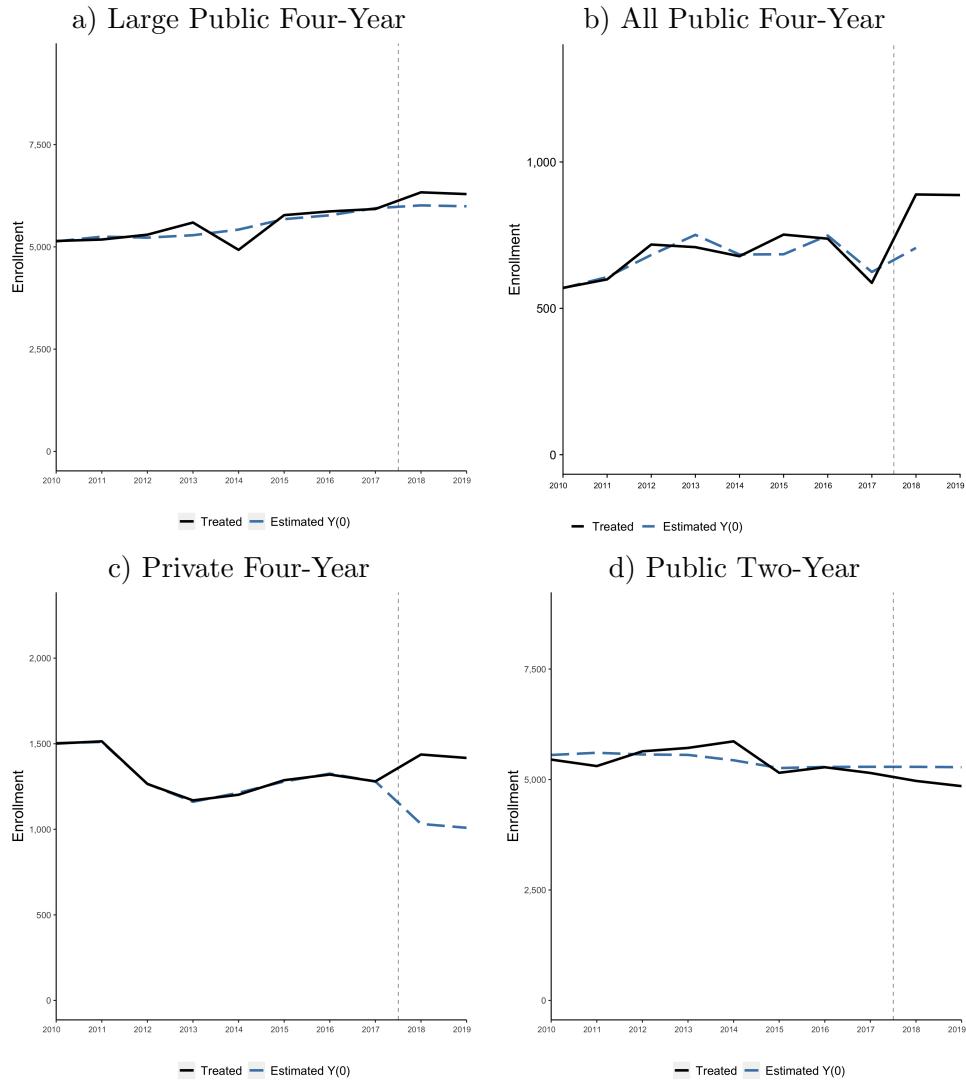


Figure 23: Black Student Enrollment in Louisiana - Excluding SEC States

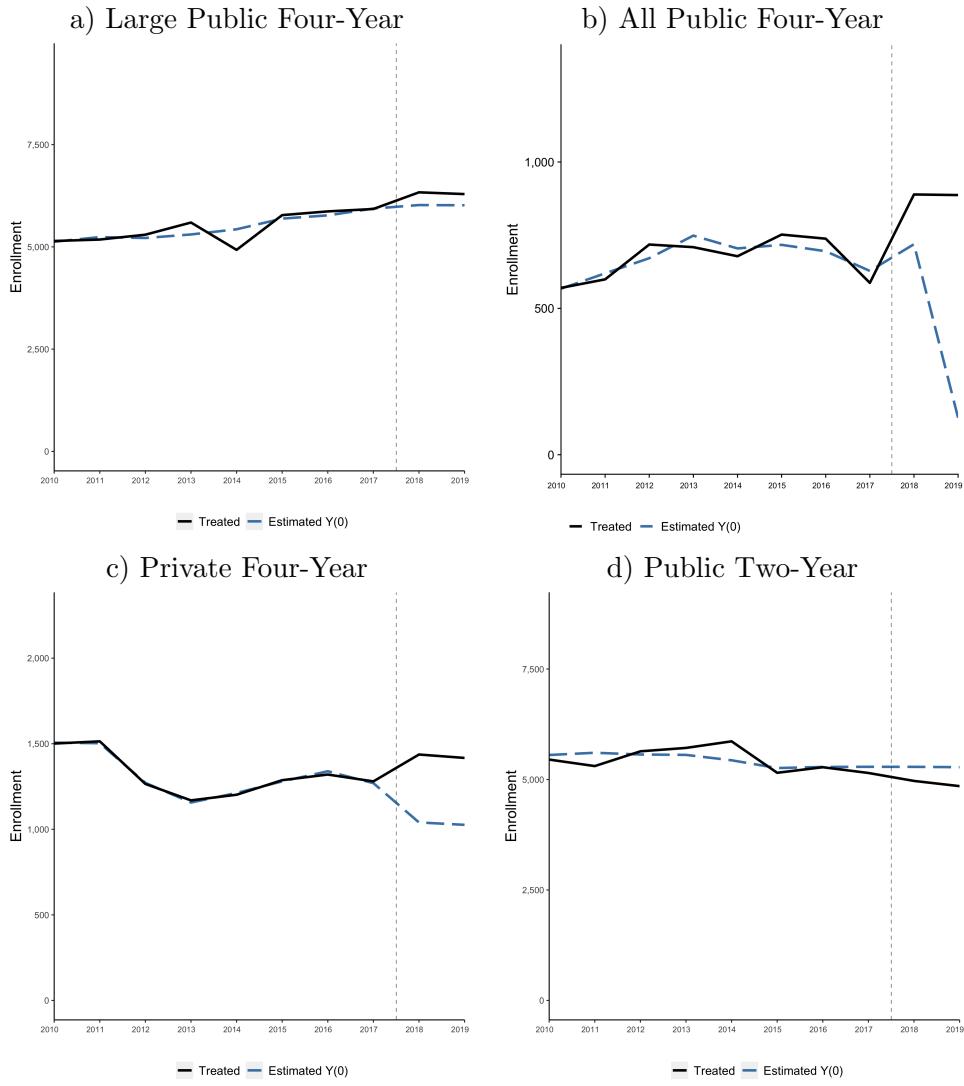


Figure 24: Hispanic/Latino Student Enrollment in Louisiana - Excluding Neighboring States

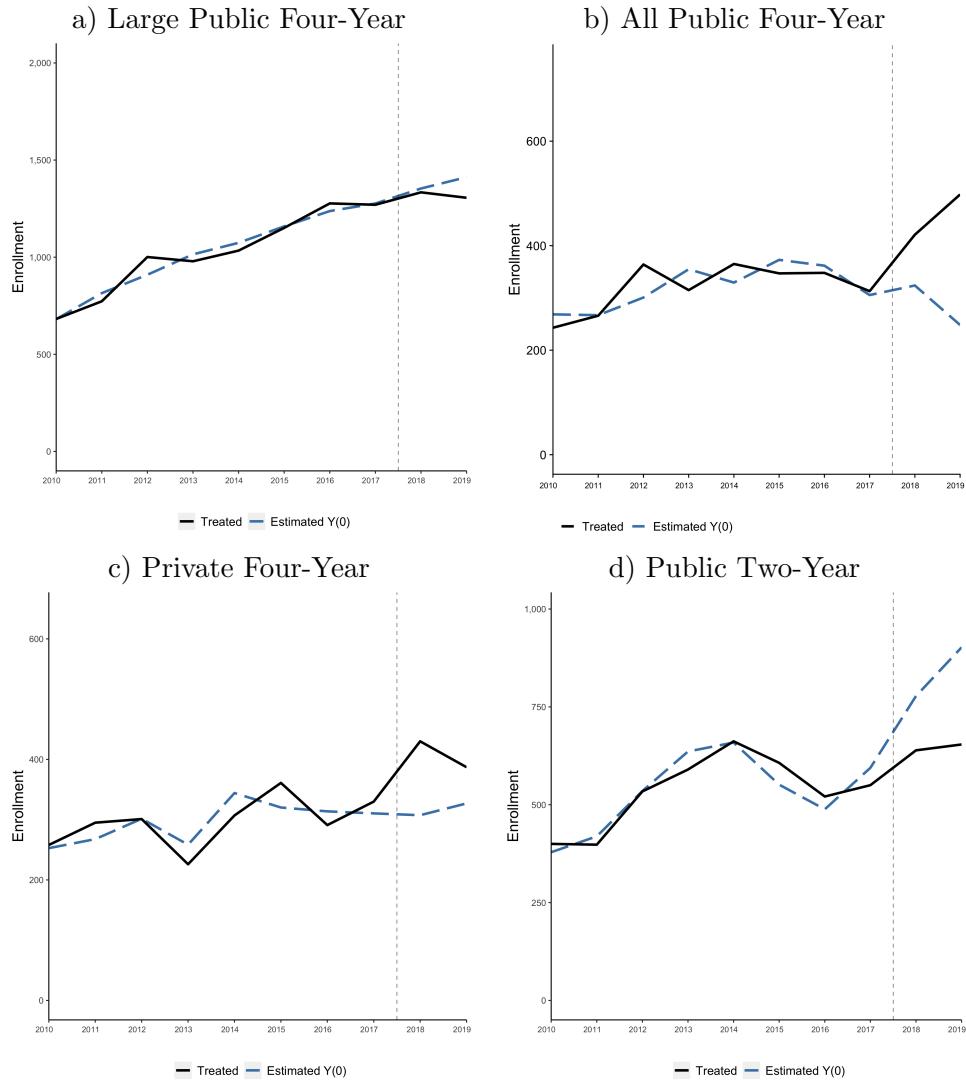


Figure 25: Hispanic/Latino Student Enrollment in Louisiana - Excluding SEC States

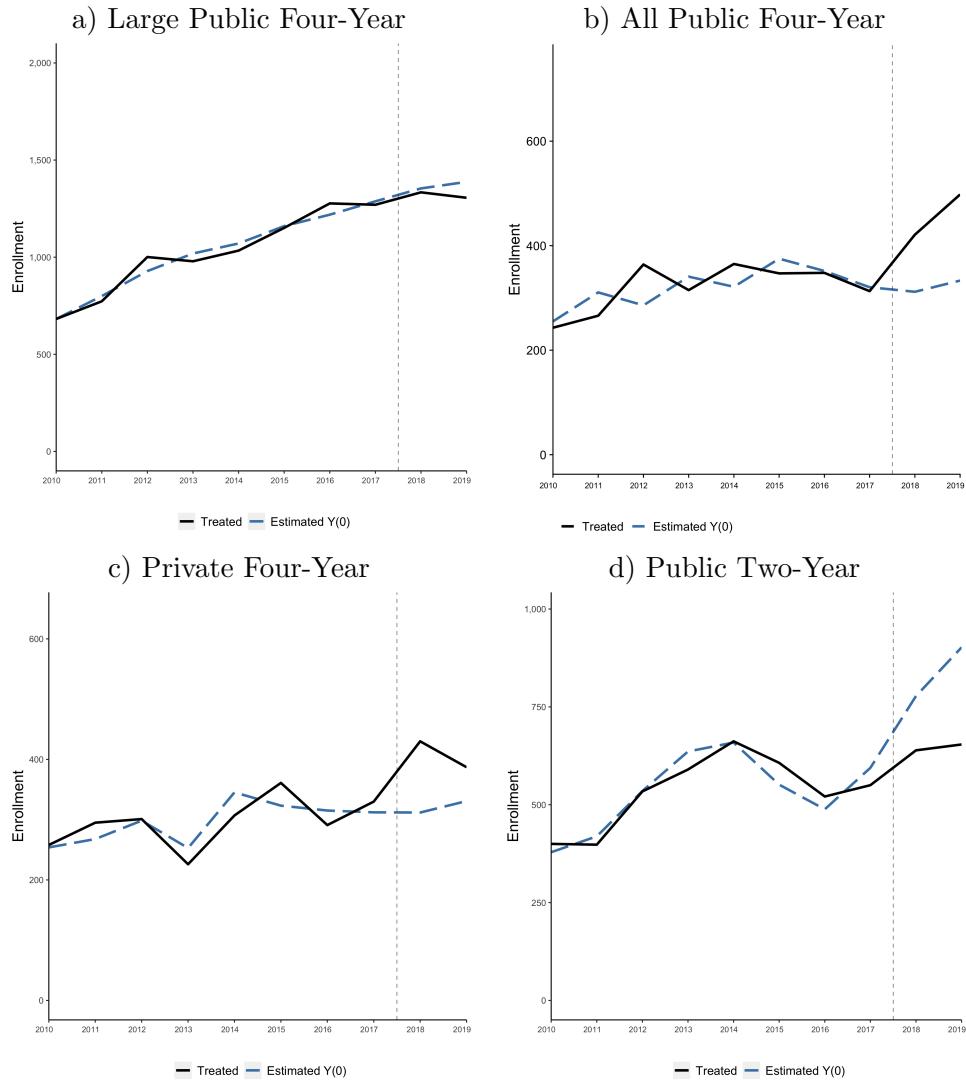


Figure 26: Asian Student Enrollment in Louisiana - Excluding Neighboring States

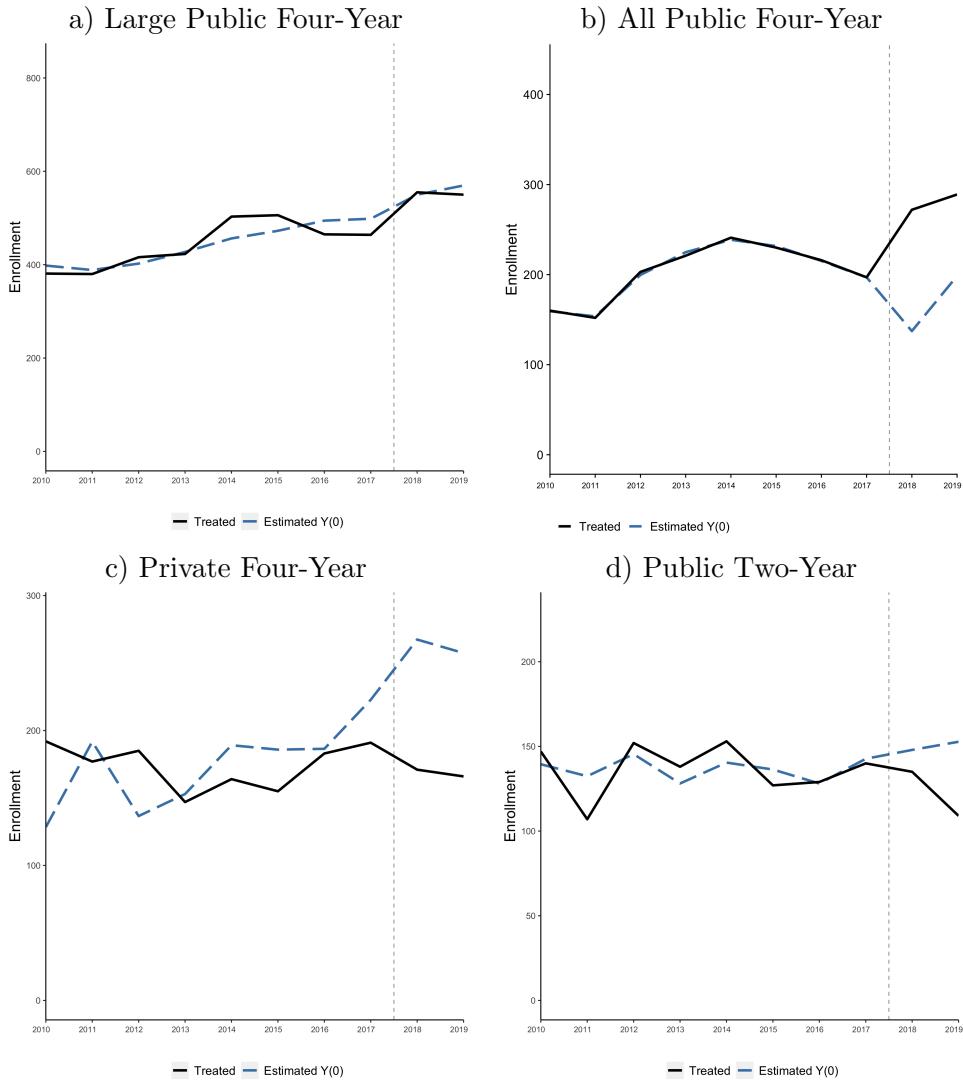


Figure 27: Asian Student Enrollment in Louisiana - Excluding SEC States

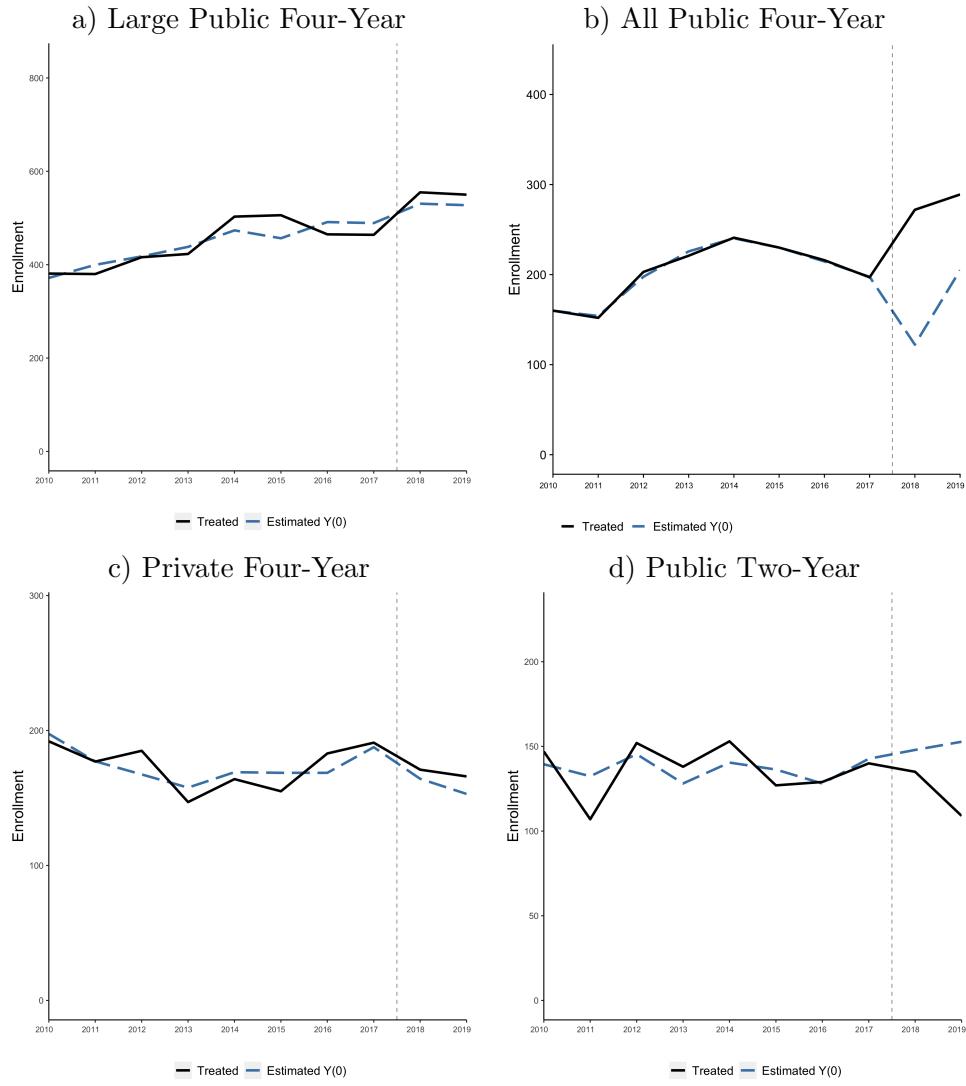


Figure 28: Total Pell Grant Awards in Louisiana

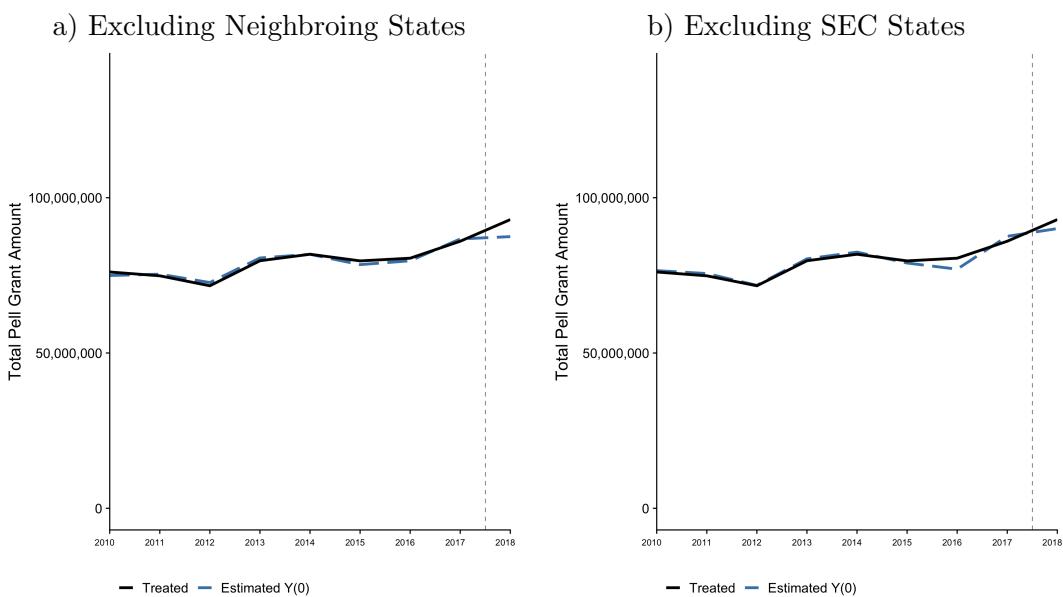


Figure 29: Total Pell Grant Awards for Louisiana by Tuition - Excluding Neighboring States

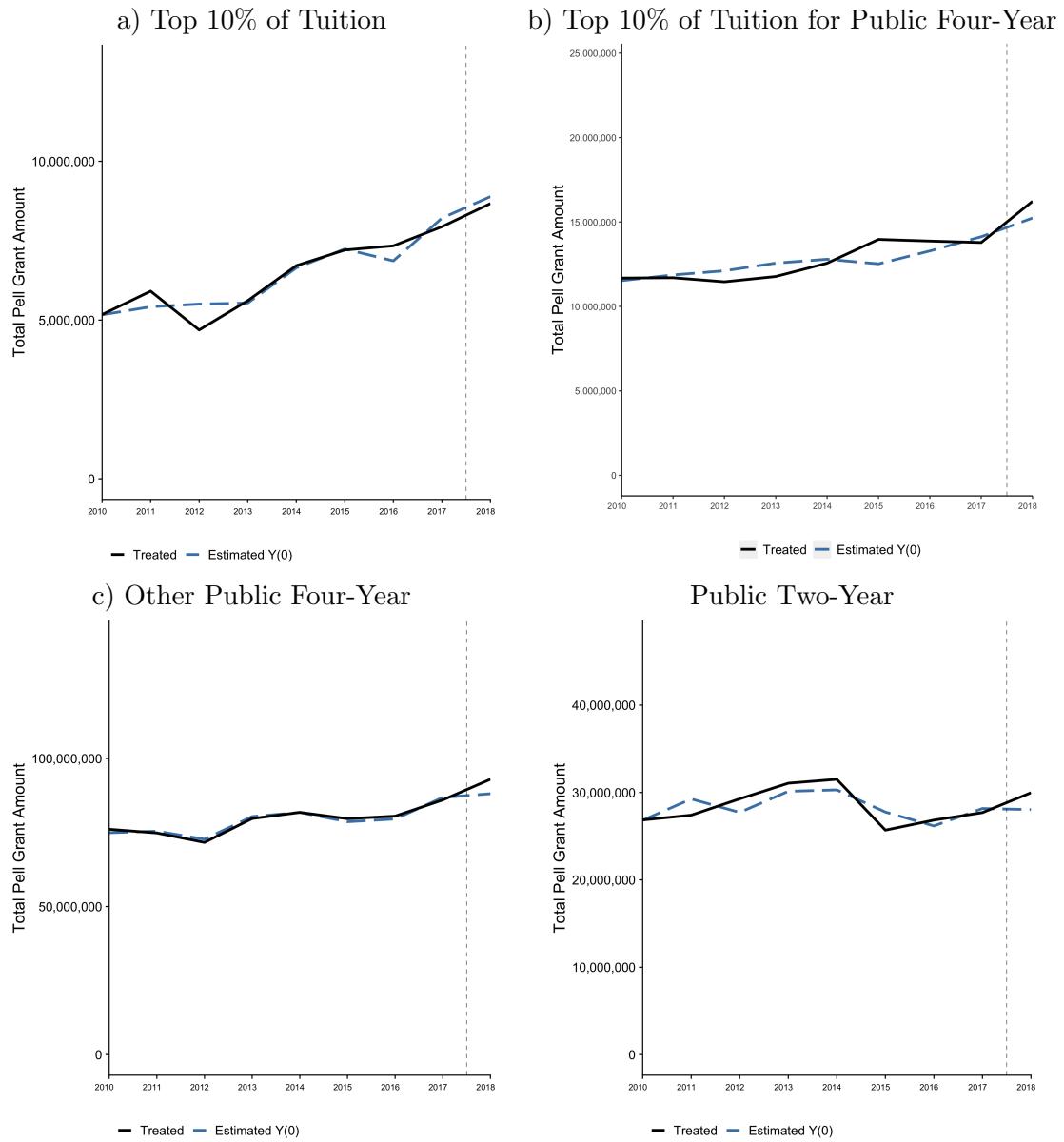


Figure 30: Total Pell Grant Awards for Louisiana by Tuition - Excluding SEC States

