

# For-Profit Charter Schools: An evaluation of their spending and outcomes

*By Stéphane Lavertu and Long Tran*



Foreword by  
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## About

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# Contents

Foreword	3
Introduction	7
Data and Methods	12
Findings	
Differences in how for-profit nonprofit charter schools allocate resources	14
Comparing the results of for-profit and nonprofit charter schools	19
Implications	23
Appendix A	24
Appendix B	32
Endnotes	36

# Foreword

**By Amber M. Northern and Michael J. Petrilli**

After a [tumultuous and mostly hostile reception](#), the Biden administration’s [regulations](#) for the federal Charter Schools Program (CSP)—which provides start-up and expansion grants—were finalized in July. Although the Administration [backpedaled partway on issues related to community demand and racial integration](#), its final rules maintained its war against for-profit charters, in line with the president’s [campaign promises](#).

We understand perfectly well that the phrase “for-profit charter schools” can conjure up images of stout old men in suits greedily raking in cash on the backs of poor families and students. We also recognize that a few charter operators are closer to that depiction than choice supporters might care to admit. Yet that image is based on a misnomer married to a misconception.

That’s because all U.S. charter schools (save for a handful in Arizona) are not only governed and regulated by public agencies, but also must operate as nonprofit organizations run by their own boards. Those boards may—and many do—choose to enter into contracts with for-profit or non-profit management organizations that provide specific services for one or more schools. They do this in the interests of quality, efficiency, and economy, much as traditional public schools obtain various administrative and academic supports from their central offices, even as many districts obtain services ranging from busing to textbooks to clinical psychology to cafeteria food from for-profit vendors. Strictly speaking, then, almost nowhere in America is there such a thing as a “for-profit charter school.” What there are are some non-profit schools that contract with for-profit management organizations for a range of goods and services.

If that explanation strikes you as technocratic, you’re not alone. Most people fail to make a distinction between whether a school is providing a service directly via its own regular staff or is obtaining it via another entity. One result of that failure to read the fine print is that charter critics and enemies run into a few challenges when they erroneously refer to “for-profit schools.”

Such animosity certainly oozes through the dense requirements that CSP applicants must henceforth meet if they choose to work with for-profit management organizations. For starters, they must ensure that goods and services purchased from such an organization are of fair market value, that the school’s governing board is making key programmatic decisions, that members of said board are not selected by the management organization, that the management contract is severable, and on and on.

We’re all for reasonable safeguards to guard against rotten apples in the charter barrel. But note the crucial missing link: The federal regs appear oblivious to whether the functions performed by a for-profit organization have anything to do with *school quality*. Heavy on inputs, the final regs ignore how for-profit management companies might serve to benefit (or harm) charter students academically. They also fail to make some vital distinctions within the variegated world of schools that work with outside providers.

This study sheds much light on these key points. Using recent data from Ohio, Professor Stéphane Lavertu and Assistant Professor Long Tran of The Ohio State University dig into what is meant by “for-profit” charter schools, how they spend resources differently from other charters, and how they compare in effectiveness to other charters (and to traditional public schools) in academic and nonacademic outcomes.

The full report is well worth your time, but for the time-challenged, here's the gist of what they found.

First, as explained above, Ohio has no “for-profit charters.” But the 208 charter schools included in the study can be split into three categories: those that mostly manage their own operations (47 schools, or 23 percent), those that outsource goods/services to non-profit organizations (55 or 26 percent), and those that outsource goods/services to for-profit organizations (106 or 51 percent). The lattermost typically send more of their operating funds to their (for-profit) management organizations than do charter schools with non-profit management organizations.

Further, the roughly half of charter schools that outsource to a for-profit management organization (n=106) can be further subdivided into those that contract for personnel services and those that choose to hire their own staff. Three-fourths (n=78) of the charter schools that work with external for-profit organizations contract for staff. And because staffing is the largest item in any school budget, those schools send the bulk of their operating funds to those organizations. The remaining one-fourth (n=28) hire their own staff and, consequently, send smaller checks to for-profit management organizations. This staffing distinction is important, as teachers and other staff are the heart of any school—and a charter school board that directly employs its own retains more control over the content and quality of its curricula, its pedagogy, and its personnel than one that outsources staffing.

Drs. Lavertu and Tran also find that charters that contract with for-profit entities for staffing spend more in the classroom and less on administration than their counterparts that work with non-profit organizations. That's good. But they also drive heightened rates of chronic absenteeism among the charter sector. Not so good.

Finally, the study examines school effectiveness and largely replicates what Dr. Lavertu found in an [earlier analysis](#) of Ohio charter schools: So called for-profit and non-profit charter schools both outperform traditional public schools, but non-profits also outperform for-profit charters, particularly in mathematics.

We draw four implications from these results.

**First, readers who are automatically inclined to hate so-called for-profit charter schools should rethink their priors.**

These schools tend to focus on instruction versus administration, as they spend more on classroom activities and offer more instructional hours, particularly in the middle grades. What's more, they outperform district schools, particularly in English language arts. Meaning that if these schools went away, their students would be worse off on average if they ended up back in their district schools.

**Second, as with all schools, we shouldn't view for-profit charter schools as a monolith.**

There are 106 charters in Ohio (about half of the study sample) that contract with for-profit management organizations. Seventy-eight of them turn over nearly everything, including personnel, to those organizations, while the remaining twenty-eight directly employ all or nearly all of their personnel, choosing instead to contract for specific (and less expensive) services. Since personnel is the biggest

budget item in a school, charters that externally contract for it purchase services that, on average, comprise 91 percent of their total expenditures. Those charters that directly employ their own staff purchase services from their for-profit management companies that comprise on average 39 percent of their total expenditures.

That's a big difference.

It's not a huge leap to assume that a school's relative level of control is correlated to the portion of its budget that it outsources. Schools that outsource over 90 percent of their budgets have essentially surrendered control of key decisions, not only the hiring of their most important asset (teachers!), but largely what they teach and how, as well as decisions about learning loss, parental engagement, school discipline, the master schedule, and so on. Schools that purchase less than 40 percent of services effectively retain "majority control" over the running of the school. They continue to shape some of the fundamental educational goals and practices of the school, as well as its likelihood of succeeding academically.

**Third, for-profit charter schools in Ohio that outsource nearly all services perform worse than those that outsource fewer.**

It's true that students in Ohio for-profit charter schools are more likely to be chronically absent than students in non-profit charter schools or traditional public schools. However, this result is driven *entirely* by the for-profit charter schools that send nearly all of their operating funds to their for-profit management organizations, also known by detractors as "[sweeps contracts](#)." Compared to charter schools that contract with non-profit management organizations, these contract-centric charter schools also have more students per teacher and more teacher turnover, which could manifest into weaker [student-teacher relationships](#) that depress attendance.

We can't underscore enough the importance of differentiating among charter schools in the for-profit space. Case in point: Students enrolled in charters that hire their own staff—and are therefore less reliant on management organizations for instructional delivery—actually experience *improvements* in attendance rates and *declines* in rates of chronic absenteeism compared to their more contract-centric peers. Simply put, some so-called for-profits schools are better than others.

**Fourth and finally, because of this variation, we should avoid regulating charter schools based on the tax status of their management organizations.**

We understand that some people just don't like the idea of "for-profit charters," but the proof is in the pudding. Some of them are [quite good](#)—including those with management companies that run core academic functions—and they bring much needed capital to the sector. We need to focus on their academic progress with students, not the tax status of their primary vendor. On their results, not on our ideology.

That means that we should be for *targeted* regulations, not inputs-based laundry lists or poor attempts to quantify the involvement of management organizations. To wit, the final federal regs say in numerous places that the applicant must provide assurance that a management organization does not exert “full or substantive administrative control over the charter school.” They go on to say that the “use of the term ‘substantial’ is intended to put grantees and subgrantees on notice that in most cases, a management organization that exercises ‘substantial’ control over a charter school would be considered to be exercising an impermissible amount of control over the CSP project.”

Does this mean that charter schools that contract externally for staffing are on the outs, given that the bulk of their operational funding goes to their management organization for this purpose? Does outsourcing back-office support to organizations set up to handle it—as many administratively-lean community-based charters do—equate to “substantive administrative control”?

We’d argue that these are the wrong types of criteria by which to disqualify participation in a federal program, much less to gauge a successful school. Instead of fretting about the cost of the contract, how much it comprises of the school’s overall funding, and the duration of involvement (among numerous other things), how about taking into consideration the management organization’s track record of success with the service(s) that they are providing? No matter what they are contracted to help the school with, will it be completed successfully and efficiently? Outcomes, not the myriad details dancing around them, is what we should most care about.

\*\*\*\*\*

Applicants to the federal Charter Schools Program were barely given a month to complete their applications after the final regulations were issued. It’s hard to grasp how any school leaders could finish such a daunting task in so little time. But, like it or not, charter schools are used to having to prove themselves. Grants are to be announced within days. We’ll be looking to see which state entities, developers, and charter management organizations make the cut—and whether any high-quality for-profit schools are in the mix. Stay tuned!

# Introduction

Biden administration officials at the U.S. Department of Education proposed in March 2022 to make it [more difficult](#) for charter schools to open or expand, as well as to deny federal funding to so-called “for-profit charter schools.”<sup>1</sup> In July, the [administration’s final rules and regulations](#) relative to the Charter Schools Program (CSP) grants largely followed through on these intentions, making it hard for for-profit charter schools to access federal start-up funds. House Democrats are also working to incorporate the rules into appropriations bill language, meaning that both the executive branch and Congress are targeting these schools. And multiple states have already banned (e.g., California) or considered banning (e.g., Ohio) for-profit entities from the charter sector.

But what do we mean exactly by a “for-profit” school? After all, every U.S. charter school (save for a few in Arizona<sup>2</sup>) is a nonprofit entity, in that the school—which holds the charter approved by the authorizer—must be a nonprofit organization recognized by the Internal Revenue Service. That means that the school must put any profit (i.e., net income) it generates back into the organization to further its public mission, as opposed to enriching owners as in for-profit businesses. Moreover, the authorizing organizations that sponsor and oversee schools—the organizations that grant schools those charters—must be public agencies or nonprofit entities. So, by law, definition, and practice, charter schools are not “for-profits.”

Typically, when critics use the term “for-profit charter school,” they mean that a nonprofit charter school has contracted out its operations or services to a for-profit organization—not that the school itself is for-profit. What complicates matters is that it is common for *all* public schools—both traditional and charter—to contract with for-profit vendors for a variety of services, from transportation and building maintenance to food service and student tutoring. Vendors also supply basics such as desks, textbooks, and paper.

Should the definition of a for-profit charter school include any school that contracts for goods or services from a for-profit entity? Should distinctions be made between the types of services—managerial, instructional, or other operations—or based on the extent of goods and services provided? For instance, if the latest rules are read as cutting off federal start-up dollars to “for-profit” schools, will they inadvertently eliminate funding to some nonprofit, community-based schools, too, just because they outsource “too many” services to for-profit organizations?

The [latest regulations](#) seek to make some of these distinctions. For instance, they

**“ . . . require applicants to provide assurances that they will not relinquish full or substantial administrative control of their CSP grants or subgrants to a for-profit management organization and that any management contract with a for-profit management organization will contain specific provisions to mitigate the risks associated with such contracts.”**

What comprises “full or substantial administrative control” may be open to interpretation, but other new requirements are not. For example, applicants are required “to conduct a needs analysis and to submit detailed information on their management contracts with for-profit entities, including nonprofit charter management organizations (CMOs) operated by or on behalf of for-profit entities.” They must



also “provide assurance that they will post on their websites information regarding any management contract between the charter school and a for-profit management organization.”

What these new regulations ignore is how the particular functions that a for-profit organization performs correspond to school quality. Would restrictions on purchasing services from for-profit vendors limit or enhance high-quality public school options? Those opposed to charter schools contracting with for-profit organizations claim that, because state per-pupil funding formulas put a ceiling on revenues per pupil, a profit motive could lead for-profit charter school operators to minimize spending and, consequently, lower educational quality.

On the other hand, charter schools—which in many major cities receive, on average, [33 percent less funding](#) per student than traditional schools—can increase per-pupil revenue by enrolling more students and realizing economies of scale, which still requires meeting the expectations of parents, authorizers, and state officials to remain open.

To date, we know very little about whether a charter school’s use of for-profit organizations affects its quality. To better understand these differences among charter schools and how these differences affect students, this report uses administrative data from Ohio to answer the following research questions:

- 1. What makes a charter school “for-profit” vs. “nonprofit”?**
- 2. How do for-profit and nonprofit charter schools spend resources differently?**
- 3. How does the effectiveness of “for-profit” charters compare to the effectiveness of traditional public schools and “nonprofit” charters in terms of standardized test scores, end-of-course exam scores, and attendance and disciplinary outcomes?**

We are not able to determine how much “profit” is made by a for-profit organization hired to render services for a charter school. We have access to school-level expenditure data that schools and districts report annually, as well as charter schools’ financial forecasts. But we do not have access to the budgets or earnings reports of the for-profit organizations that are contracted to help schools. Still, the present study is by far the most systematic analysis of for-profit vs. nonprofit-operated schools that has been conducted to date.

## Ohio context

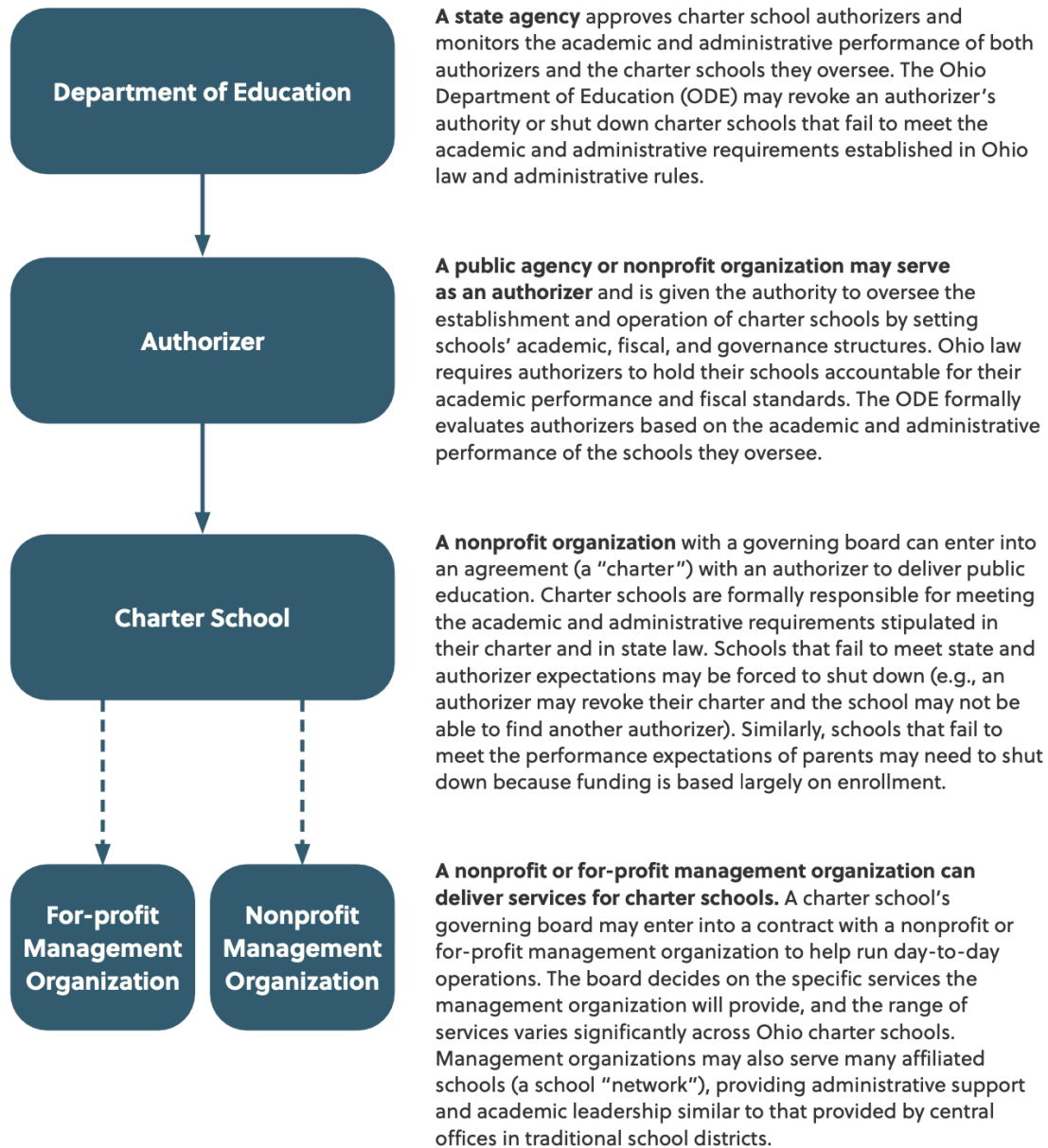
Ohio is an ideal state to explore these questions. Not only is it one of only a handful of states with a sufficiently large number of charter schools that use for-profit organizations,<sup>3</sup> but it is also the only state in the country that makes charter school contracts with vendors publicly available, including fine-grained financial data<sup>4</sup> (though, as indicated above, the CSP regulations may change that). It is also atypical in the wide variety of charter school authorizers it permits, including local school districts, other public agencies, and nonprofit entities (including the Thomas B. Fordham Foundation).

Ohio is typical, however, in that its brick-and-mortar charter schools on average provide considerable educational benefits to disadvantaged student populations. It seems reasonable to assume that the results documenting the advantages and disadvantages of for-profit charter schools (relative to both nonprofit charters and traditional public schools) could apply in other contexts.

Figure 1 provides an overview of Ohio charter school governance and operations. As indicated, all Ohio charter schools are deemed both public schools—governed and regulated by public agencies—and nonprofit organizations run by their own boards. Charter schools’ governing boards may also choose to enter into a contract with for-profit or nonprofit management organizations (“operators”) that provide specific services for one or more schools (a.k.a. a charter school “network”)—much like the administrative supports and academic leadership provided to traditional schools via district central offices (see the last boxes in Figure 1). Technically, then, there is no such thing as a “for-profit charter school” in Ohio or in virtually any other state<sup>5</sup>—just for-profit management organizations.

Still, for the sake of consistent nomenclature, we adopt the same (albeit confusing) shorthand. We identify charter schools as “for-profit” if they contract with a management organization that the State of Ohio has identified as a for-profit corporation. “Nonprofit” charter schools, on the other hand, are those that contract with nonprofit organizations for management services or those independent community-based schools that manage their own operations.

**Figure 1. State government and non-profit organizations can oversee charter schools in Ohio, but for-profit organizations may help in running day-to-day school operations.**



**Note.** For more information on this organizational hierarchy, consult the Thomas B. Fordham Institute’s guide “Ohio Community School Governance: An Overview” (updated February 26, 2019), available at <https://fordhaminstitute.org/ohio/research/policy-brief-ohio-community-school-governance>.

## What do we know about for-profit charter schools?

Although politically controversial, for-profit organizations in the charter school sector have received little attention from scholars. Researchers sometimes distinguish networks of charter schools that are managed by for-profit education management organizations (EMOs) from those managed by nonprofit CMOs, but only a handful of studies have explored the educational impact, enrollment patterns, or distinctive administrative practices of the for-profit organizations operating in the charter school sector.

A few analysts have examined the impact of for-profit charter schools on academics. A recent Fordham Institute report on Ohio's brick-and-mortar charter schools (with the same lead author as the current study) found that charter schools operated by for-profit and nonprofit management organizations both had greater student achievement gains than traditional public schools operating in the same geographic school districts.<sup>6</sup> CREDO's study of CMOs included a brief comparison of the educational impact of charter schools that contracted with for-profit as opposed to nonprofit organizations to manage school operations. It found that, on average, charter schools operated by nonprofits realized greater student achievement gains in 2014–15 than those operated by for-profit organizations, although the analysis did not distinguish between brick-and-mortar and online "virtual" schools, which precludes apples-to-apples comparisons.<sup>7</sup> Harvard's Susan Dynarski and colleagues examined the for-profit National Heritage Academies network and found that its students had substantially greater achievement gains in mathematics than they would have had had they attended traditional public schools, although they found no statistically significant effects in reading achievement, attendance, or disciplinary incidents.<sup>8</sup>

There is also evidence that for-profit charters might yield administrative innovations that improve student outcomes. Like a couple of other studies, a 2017 study of charter school operators in Florida found that charter schools overall had achievement gains comparable to traditional public schools and that those operated by for-profit EMOs had achievement gains comparable to those operated by nonprofit CMOs.<sup>9</sup> Importantly, though, the study revealed significant efficiency advantages for networked for-profit schools. Although these schools exhibited only modestly greater student achievement gains than nonprofit-operated schools, they spent significantly less to realize those outcomes.

Research on the delivery of public services in other sectors provides mixed results regarding the relative effectiveness of for-profit and nonprofit organizations, though a recent review of research in higher education reveals that for-profit schools had, on average, a negative impact on student outcomes.<sup>10</sup>

## Data and Methods

The analysis compares the administrative practices (e.g., staffing and budgeting) and educational effectiveness (e.g., gains in achievement and attendance rates) of various types of charter schools in operation during the 2018–19 school year (hereafter 2019)<sup>11</sup>—the last prepandemic year for which student-level outcome data are available. We analyze schools serving elementary and secondary grades separately because their administration often differs in key ways.<sup>12</sup> We focus on differences in average outcomes between sectors: nonprofit charter, for-profit charter, and traditional public schools.<sup>13</sup>

**Table 1. Ohio charter school counts by type (2019)**

	Full Sample	Nonprofit – Community-based	Nonprofit – Mgmt. org.	For-profit – Mgmt. org.
<b>Brick-and-mortar charter schools</b>				
General education	210	47	55	108
Special education	30	6	22	2
Dropout prevention and recovery	60	20	7	33
<b>Virtual charter schools</b>				
General education	5	1	0	4
Dropout prevention and recovery	9	4	5	0
<b>Total charter school count</b>	<b>314</b>	<b>78</b>	<b>89</b>	<b>147</b>

**Note.** The table presents counts of charter schools by type. It includes only those schools that operated for the entire 2018-19 school year and for which we have financial forecast data. All for-profit dropout prevention and recovery schools are stand-alone high schools (grades 9-12). Two schools without a management organization (according to ODE records) are categorized as “non-profit-management organization” because nearly all expenses were allocated to purchased services from an outside non-profit organization.

We use Ohio’s publicly available school-level financial data and teacher-level staff data. We obtained every charter school’s financial forecast from May 2019,<sup>14</sup> as well as school-level expenditure data that schools and districts report annually.<sup>15</sup> The forecast data allow us to characterize the extent to which charters utilize the organizations from which they purchase services (both for-profit and nonprofit), whereas the school-level expenditure data enable comparisons of inputs in charter schools and traditional public schools using a consistent coding scheme. We use a number of other publicly available datasets to obtain information on school personnel and other characteristics.<sup>16</sup>

We also obtained from the Ohio Department of Education student-level data that provide school of attendance for each grade and year, demographic and academic characteristics (race, economic disadvantage, gender, disability status, and English-learner status), scale scores on mathematics and English language arts (ELA) exams in grades 3–8, scale scores on high school exams (Algebra, Geometry, ELA I, ELA II, and ACT/SAT), counts of reported disciplinary incidents for which the schools expelled or suspended a student, the number of instructional hours for which a student was present, and whether a student received a high school diploma. We normalize state test data for grades 3–8 such that student scores capture their distance in standard deviation units from the statewide mean in a given subject,

grade, and year. We normalize high school tests by subject and year only, as students may take these tests in different grades.<sup>17</sup>

We compare the administrative inputs and educational impacts of schools operating in the same geographic school district. Comparing nearby schools helps to take into account regional differences relative to how much it costs to educate children and variation in students' demographic characteristics.<sup>18</sup> As described in Appendix A, we use models that account for such fixed differences between districts.

Comparing students who attend school in the same geographic district goes a long way toward making sure that we are comparing the educational outcomes of students who are identical except for the type of school they attend. Still, to address the issue that students who select into one school type may nonetheless differ from those who select into another school type, we follow the well-established practice of comparing student-level changes in educational outcomes between students who are nearly identical in observable characteristics but who attended different types of schools. As explained in Appendix A, we include statistical controls for students' baseline test scores, attendance rates, rates of disciplinary reports, and various other observable characteristics (e.g., economic disadvantage).<sup>19</sup>

Finally, to provide the most credible assessment possible of Ohio charter schools, we focus primarily on brick-and-mortar ("site-based") charter schools serving "general" student populations according to the Ohio Department of Education<sup>20</sup> (shaded in Table 1).

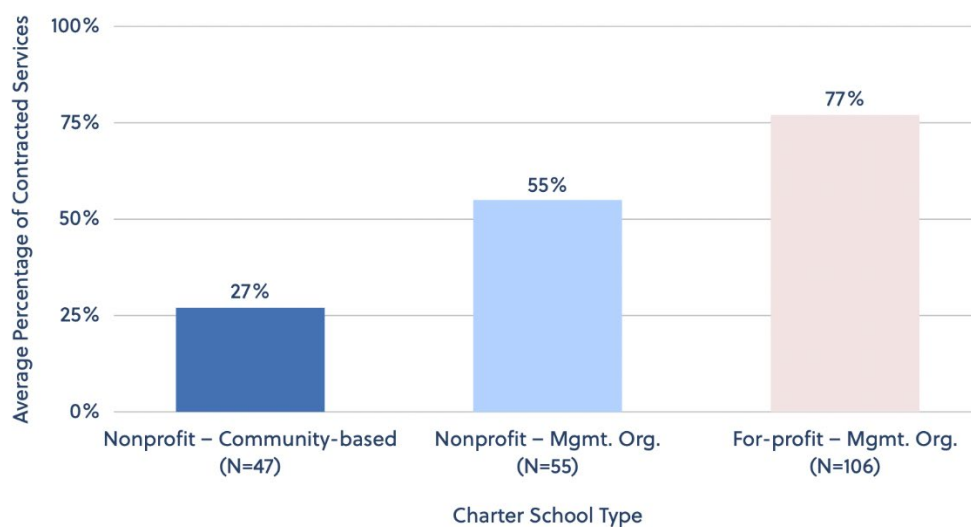
## Differences in how for-profit and nonprofit charter schools allocate resources

**Summary of Results:** This section examines how charter schools contract for services and spend revenues. We find that for-profit charter schools send more of their operating funds to their management organizations than do their nonprofit counterparts. Moreover, contractual data show that there are actually two types of for-profit charter schools, distinguished by whether they contract for personnel services or, instead, hire their own staff. For-profit charter schools also spend more in the classroom and less on administration than their nonprofit counterparts.

**Finding 1: For-profit charter schools typically send more of their operating funds to their management organizations than do nonprofit charter schools with management organizations.**

Figure 2 shows the percentage of services purchased via contract by charter school type. The average for-profit charter school spends 77 percent of its operating funds on purchased services, whereas the average charter school with a nonprofit organization managing its operations spends 55 percent of its funds on purchased services. The average community-based nonprofit charter school—which, by our definition, manages its own operations—spends 27 percent of its operating funds on purchased services, with none of these schools spending more than 50 percent.

**Figure 2. For-profit charter schools spend more of their operating funds on purchased services than other charter schools.**



**Note.** Statistics are limited to brick-and-mortar charter schools serving general student populations.

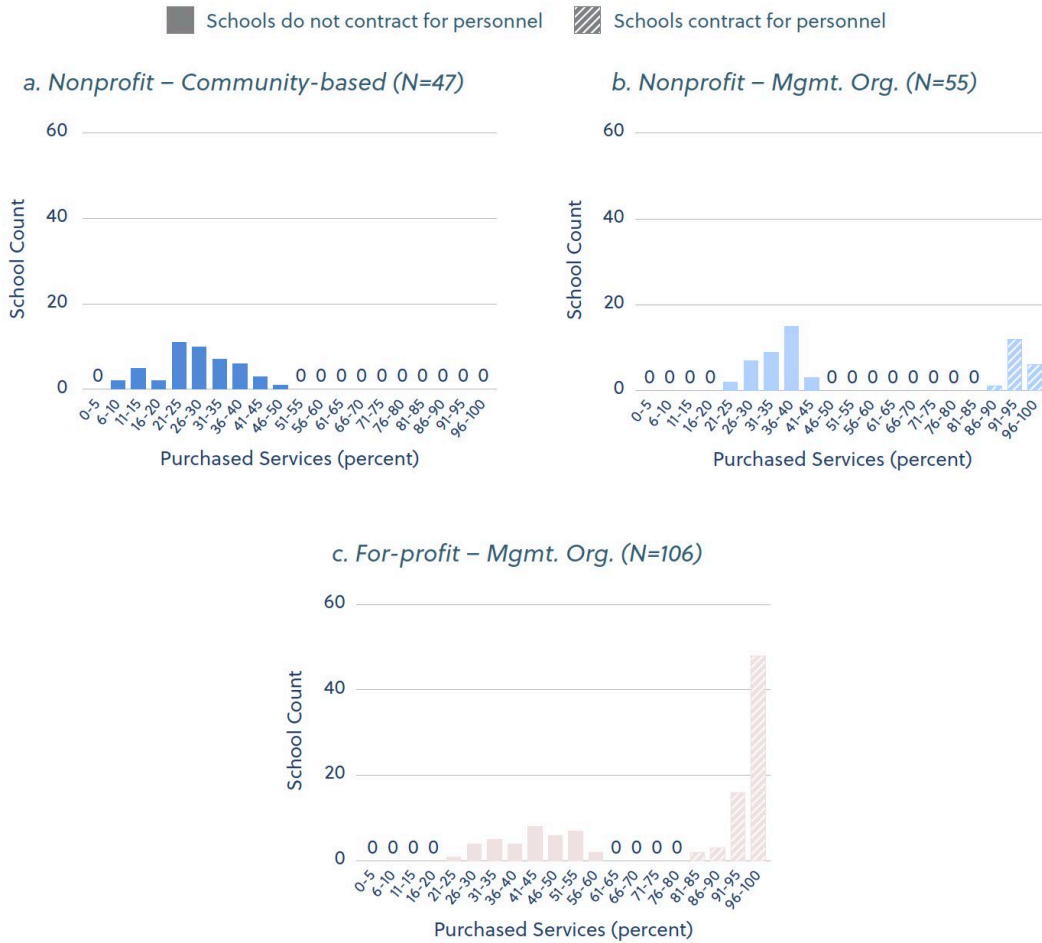
***Finding 2: Contractual data reveal two types of for-profit charter schools—those that contract for personnel services and those that hire their own staff.***

A school's key expense is instructional personnel (i.e., teacher salaries), and the data show a notable distinction in how for-profit charter schools handle these costs.<sup>21</sup> Figure 3 shows that two-thirds of for-profit charter schools purchase personnel services from their for-profit management organization (striped rose bars in panel C). Consequently, these schools send nearly all of their operating funds to their management organizations. The remaining one-third of for-profit charter schools hire their own staff and, consequently, send much less to their for-profit management organization.<sup>22</sup> This stands in contrast to nonprofit charter schools. Sixty-six for-profit charters send more than 80 percent of services from contractors, but only sixteen nonprofit schools (per the striped blue bars in panel B) do likewise.

The striking distinction between schools that hire their own staff and those that contract for staff likely has some real-world consequences. Once a school relinquishes control of their most important asset—teachers—they are effectively handing over to their nonprofit or for-profit management organization the power to shape some of the fundamental educational goals and practices of their school, as well as the likelihood of succeeding academically. Schools in which teacher contracts are held by the management organization are also operating as part of a network, suggesting more standardization of teacher practices. On the other hand, a charter school that continues to hire its own staff retains more control over its educational programming even if it has outsourced multiple other services to a management organization.



**Figure 3. Since personnel expenses are the bulk of a school’s budget, charters that contract for personnel have the highest levels of purchased services.**



**Note.** The figure presents the extent to which brick-and-mortar charters schools serving general student populations purchase services, using the Ohio Department of Education’s identification of them as not working with a management organization (Nonprofit – community based), working with a nonprofit management organization (Nonprofit – Mgmt. Org.), or working with a for-profit management organization (For-profit – Mgmt. Org.).

Table 2 describes the extent to which for-profit organizations are involved in educational delivery for different types of charter schools. Recall that a school may be for-profit or not based on the for-profit status of its management organization. For-profit schools are separated into those that have their own instructional staff (“for-profit – own staff”) and those that contract with their management organization for personnel services (“for-profit – contract staff”). As shown, the latter send nearly all of their budget (91 percent on average) to their management organizations, whereas the former send only 39 percent on average. Thus, the extent of involvement of for-profit firms (low, moderate, or high) is based on whether they do not contract with a for-profit management organization (low), contract with a for-profit management organization but hire their own teachers (moderate), or contract with a for-profit organization for virtually everything (high).

**Table 2. Charter schools vary significantly in terms of how involved their for-profit management organizations are in the delivery of educational and other services.**

School Types	Definition	School Count	Purchased services as percent of expenditures (Avg/Median)	Extent to which for-profit firm involved
Nonprofit – Community-based	Charter schools that manage their own operations.	47	27% / 27%	Low
Nonprofit – Mgmt. Org.	Charter schools that contract with a Nonprofit organization to manage operations. These may be organizations that serve a single school or CMOs that serve a network of schools.	55	55% / 38%	Low
For-profit – Mgmt. Org.	Charter schools that contract with a for-profit organization to manage operations. These may be organizations that serve a single school or EMOs that serve a network of schools.	106	77% / 94%	Moderate/High
<i>For-profit – Own Staff</i>	<i>For-profit charter schools that directly employ all (or nearly all) of their personnel.</i>	28	39% / 40%	<i>Moderate</i>
<i>For-profit – Contract Staff</i>	<i>For-profit charter schools that contract for all (or nearly all) of their personnel.</i>	78	91% / 96%	<i>High</i>

**Note:** Statistics are limited to brick-and-mortar charter schools serving general student populations. School counts do not exactly match those from Table 1 due to missing data on purchased services for two for-profit schools.

**Finding 3: For-profit charter schools that contract with management organizations for staffing spend more in the classroom and less on administration than their nonprofit counterparts.**

Table 3 shows that for-profit charter schools overall spend the same amount per pupil as nonprofit schools.<sup>23</sup> However, for-profit charter schools spend \$581 more per pupil on classroom personnel and activities and, correspondingly, \$699 less on administration. On the other hand, they have more first-year teachers (43 versus 35 percent, on average), three more students per teacher (19 versus 16, on average), and five more schools in their networks (17 versus 12, on average) than nonprofit charter schools. These latter three differences, however, are driven by the schools that send nearly all their funds to their for-profit management organizations to handle staffing and other tasks. Additionally, students in these particular charter schools experience forty-six more instructional hours annually, on average, than students in nonprofit charter schools.

Moreover, for-profit charters in general spend nearly every penny—keeping an average of just 5 percent of their operating expenditures as cash on hand to help them cope with revenue volatility (see Table A2 in Appendix A). These results paint a picture consistent with the notion that for-profit organizations seek to maximize economies of scale.<sup>24</sup>

**Table 3. For-profit charter schools spend more in the classroom and less on administration than nonprofit charter schools that contract with nonprofit management organizations, but there are significant differences between for-profit charters that do and do not purchase personnel services from their management organization.**

Characteristic	Nonprofit – Mgmt. Org. Average (N=47)	For-profit Difference		
		All For-profits (N=107)	For-profit – Own Staff (N=28)	For-profit – Contract Staff (N=79)
Schools in operator network	12 schools	+5*	-1	+6*
Percent of teachers in their first year	35 percent	+8*	0	+9*
Student-teacher ratio	16 students/instructor	+3*	+2*	+3*
Percent of teachers with a master’s degree	22 percent	+4	0	+4*
Classroom expenditures per student	\$5,588	<b>+581*</b>	+528	+594
School age (years)	10 years	+1*	+4*	+1
Annual instructional hours per student (actual)	1,004 hours	<b>+29*</b>	<b>-43*</b>	<b>+46*</b>
Average teacher experience (years)	5 years	+1*	+1*	0
Teacher annual pay (dollars)	\$37,802	-814	<b>-4,093*</b>	-14
Total expenditures per student	\$10,682	-79	-340	-17
Percent of expenditures on salary/benefits	55 percent	<b>-5*</b>	-1	<b>-6.5*</b>
Administrative expenditures per student (dollars)	\$2,816	<b>-699*</b>	<b>-1,627*</b>	-476

**Note.** The table compares 2019 characteristics of charter schools serving grades 4–8 that contract with for-profit organizations compared to nearby charters in the same district that contract with nonprofit organizations. Estimates are weighted by student enrollment. Estimates starred and bolded indicate a statistically significant difference between for-profit charter schools and the nonprofit charter schools used as a baseline ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). For-profit schools are separated into those that hire their own instructional staff (“for-profit – own staff”) and those that contract with their management organization for personnel services (“for-profit – contract staff”).

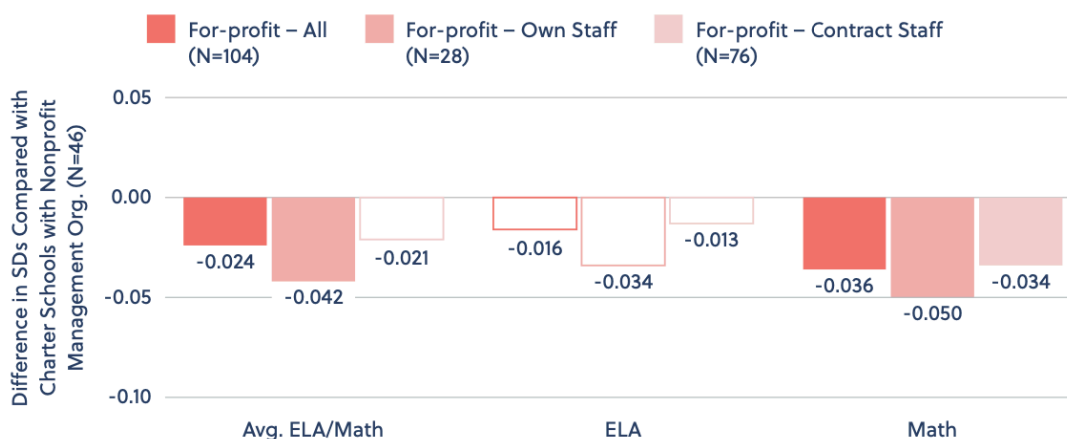
## Comparing the results of for-profit and nonprofit charter schools

**Summary of Results:** In this section, we compare for-profit and nonprofit charter schools in the same district while controlling for school composition (i.e., the average baseline test scores and demographic characteristics of their students).<sup>25</sup> We find that nonprofit charter schools exhibit slightly higher achievement gains than their for-profit counterparts and that chronic absenteeism is especially high in the latter—particularly those that contract with their management organizations for staffing.<sup>26</sup>

**Finding 4: Nonprofit charter schools exhibit slightly higher achievement gains than for-profit charter schools.**

Figure 4 compares the impact on academic achievement of for-profit and nonprofit charter schools operating in the same geographic district, holding constant their student makeup. It shows that annual achievement growth is slightly (0.02 standard deviations) lower among students in for-profit charter schools compared to similar students in nearby nonprofit charter schools with similar student bodies.<sup>27</sup> This lower growth (which is still greater than that of nearby traditional public schools) is driven by lower math achievement, particularly in for-profit schools that hire their own staff. Overall, there is no statistically significant difference in the average achievement impact of the for-profit schools that use external hiring and the nonprofit charter schools operating in the same district (though this average masks less progress in math in for-profit charters).

**Figure 4. Academic growth is slightly lower among students in for-profit charter schools compared to similar students in nearby nonprofit charter schools.**

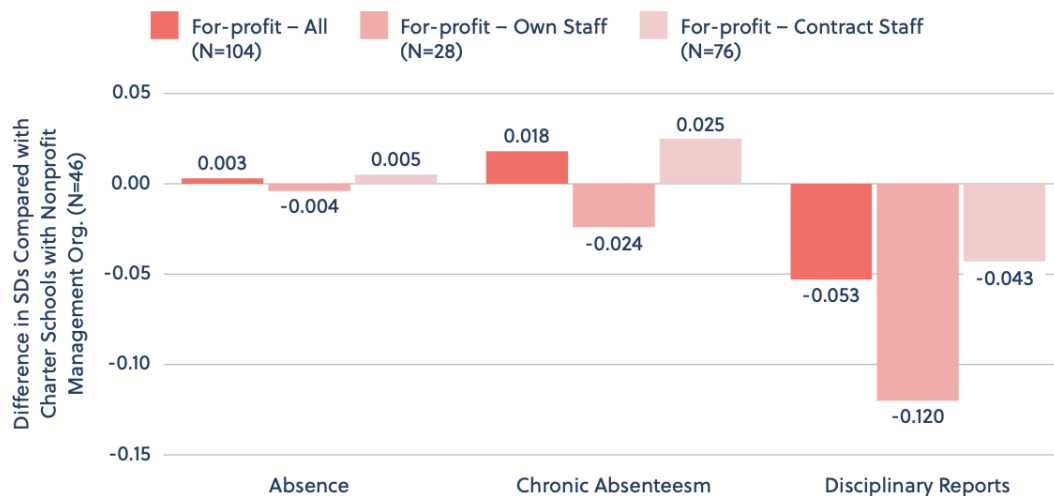


**Note.** The figure shows the annual impact of attending charter schools operated by for-profit management organizations (as opposed to nonprofit management organizations) on achievement in grades 4–8. Achievement estimates are in standard deviation units. Solid bars are statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Positive/negative estimates indicate relative increases/decreases in achievement for students attending charter schools with for-profit management organizations as compared to similar students attending nearby schools with nonprofit management organizations. For-profit schools are separated into those that hire their own instructional staff (“for-profit – own staff”) and those that contract with their management organization for personnel services (“for-profit – contract staff”). Estimates are based on 65,219 student-year observations.

**Finding 5: The heightened rates of chronic absenteeism among for-profit charter schools are driven by those that send nearly all their funds to their management organizations for staffing costs.**

Results in Figure 5 show that for-profit charter schools that contract with their management organization for staff are driving the negative attendance results in the for-profit sector. Students attending these schools experience worse attendance rates and are more likely to be chronically absent than similar students attending nonprofit charter schools<sup>28</sup> (students at these schools are also somewhat less likely to be reported for disciplinary action). In other words, the adverse effects on student attendance rates overall in the for-profit sector are driven entirely by the for-profit charter schools that contract externally for staffing services. In fact, students in for-profit charters that hire their own staff—and are therefore less reliant on their management organizations for instructional delivery—experience improvements in attendance rates and declines in rates of chronic absenteeism.

**Figure 5. Adverse effects on student attendance rates overall in the for-profit sector are driven entirely by those for-profits that contract externally for staffing.**



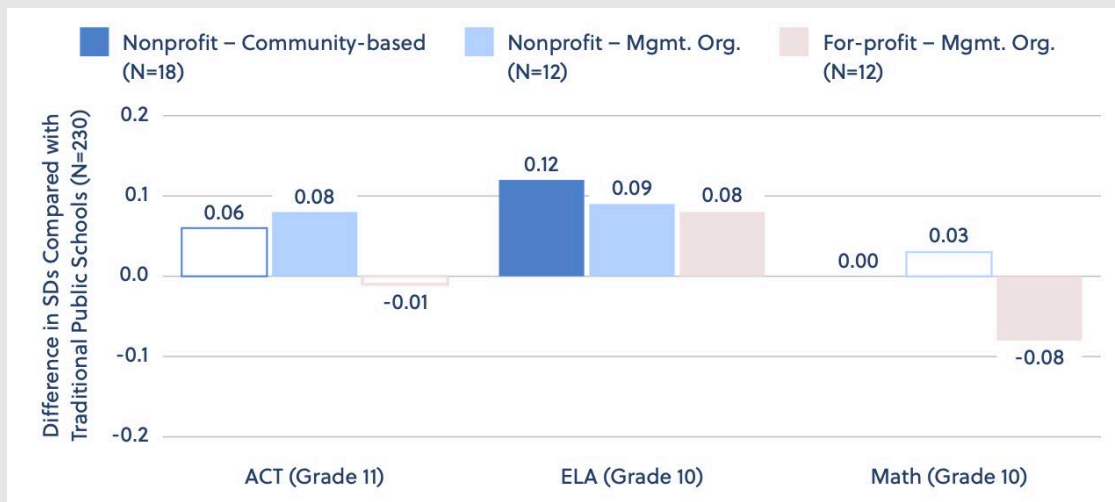
**Note.** The figure shows the annual impact of attending charter schools operated by for-profit management organizations on absence rates, rates of chronic absenteeism, and disciplinary reports among students in grades 4–8, which are fractions that translate to percentage points. Positive/negative estimates indicate relative increases/decreases in absence/absenteeism rates and the probability of disciplinary incidents for students attending charter schools with for-profit management organizations compared to similar students attending nearby schools with nonprofit management organizations. Solid bars are statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). For-profit schools are separated into those that have their own instructional staff (“for-profit – own staff”) and those that contract with their management organization for personnel services (“for-profit – contract staff”). Estimates are based on 65,173 student-year observations.

### How do for-profit charters compare to traditional public schools?

A 2020 Fordham Institute report (authored by one of this report’s authors) compared the performance of Ohio charter schools to the state’s traditional public schools.<sup>29</sup> That report found that both nonprofit and for-profit charter schools outperformed nearby traditional public schools (see Appendix A for additional evidence that replicated this finding). Moreover, within the charter sector, nonprofits outperformed for-profits.

Analyzing charter high schools, we find the results here follow those of the previous report, in revealing strong performance, although results for for-profit charter high schools are more mixed. Students in nonprofit charter high schools (particularly those attending schools with nonprofit management organizations) have greater achievement growth than traditional public-school students (sidebar Figure S1). Specifically, in grades 9–11, students in nonprofit charter schools experience achievement gains that are 0.06–0.08 standard deviations greater (as measured by the ACT, which includes both math and ELA content) than similar students attending traditional public schools (across the board, though, the charter school advantage is more pronounced in ELA). Students attending for-profit charter high schools, however, experience lower achievement growth in mathematics (0.08 standard deviations lower) than similar students in nearby traditional public schools.<sup>30</sup>

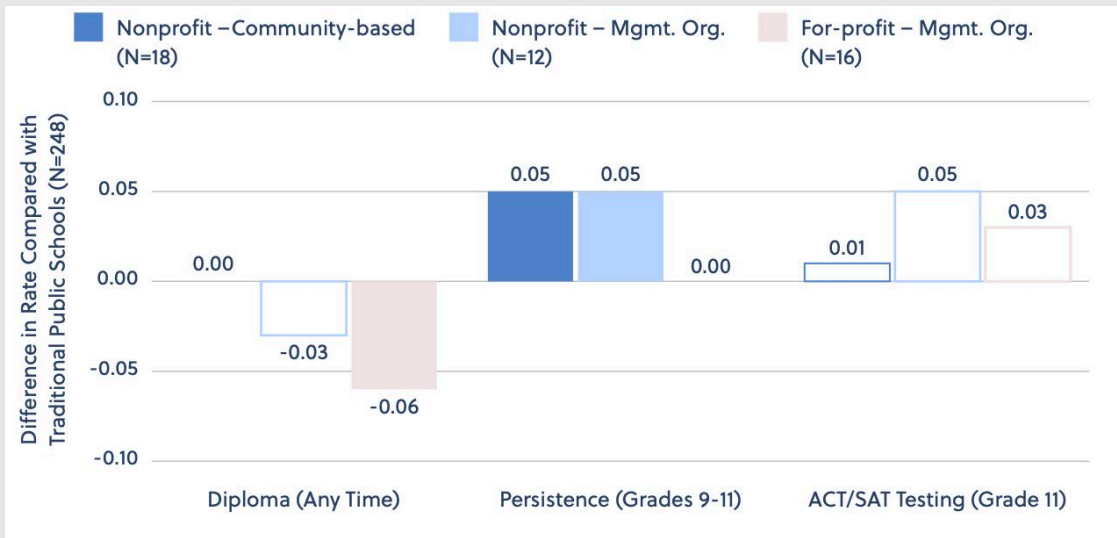
**Figure S1. High school students in nonprofit charter schools experience greater achievement than similar students attending traditional public schools.**



**Note.** The figure illustrates the annual impact of attending a charter school versus a traditional public school on student achievement growth in grades 4–8 and the total impact on growth in grades 9–10 or 9–11 (depending on the test). Achievement growth estimates are in standard deviation units. Positive/negative estimates indicate relative increases/decreases in achievement for students attending charter schools as compared to similar students attending traditional public schools. Solid bars indicate statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Estimates are based on 71,070 student-year observations.

In contrast to the strong performance of charters on academic assessments, Figure S2 shows that nonprofit charter schools offer no statistically significant advantages in terms of the probability of ever receiving an Ohio diploma and that students attending for-profit charter high schools are six percentage points less likely to do so (a 7 percent decline from the average graduation rate of 87.5 percent in our sample). However, the figure also reveals that students who attend nonprofit charter schools are significantly more likely to persist to grade 11 and just as likely (if not more) to sit for the ACT than students in traditional public schools. These results are consistent with the positive attendance

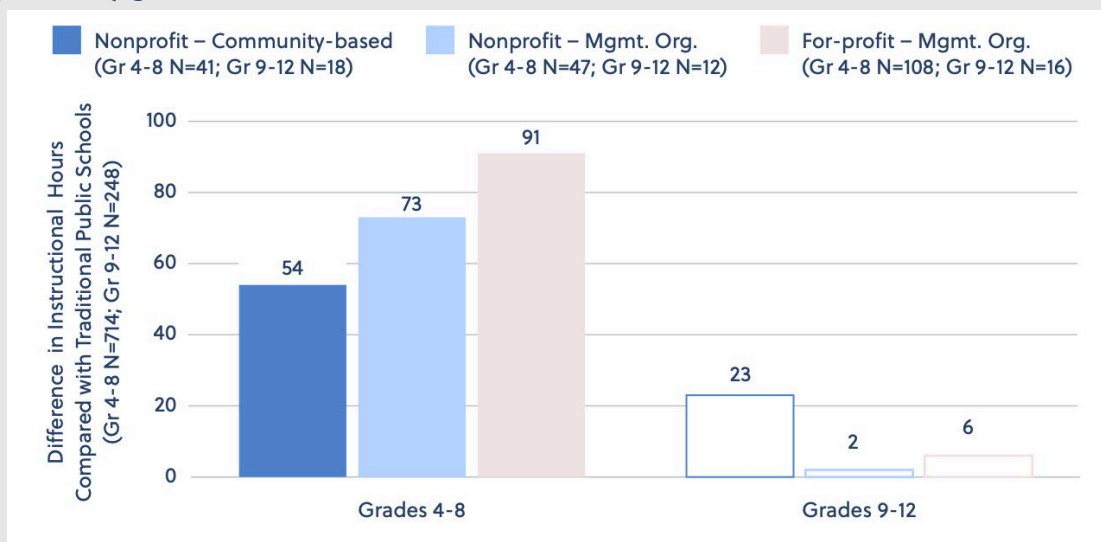
**Figure S2. Students in for-profit charter high schools are less likely to receive an Ohio diploma compared to students in nonprofit charters or traditional public schools, but comparable students in all schools are just as likely to take the ACT or SAT in eleventh grade.**



**Note.** The figure shows the differences in the graduation, persistence, and test participation rates between students attending charter schools relative to students attending traditional public schools. Positive/negative estimates indicate relative (decreases in graduation, persistence, and test participation rates for students attending charter schools relative to students attending traditional public schools). Solid bars indicate statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Estimates are based on 251,675 student-year observations.

Also worth mentioning: the strong performance of charter schools in Ohio may be a result of those schools providing more instructional hours (Figure S3).

**Figure S3. Charter schools' superior achievement growth in grades 4–8 corresponds to a significantly greater number of instructional hours.**



**Note.** The figure shows the difference in annual instructional hours for students attending charter schools relative to students attending traditional public schools. Positive (negative) estimates indicate relative increases/decreases in annual instructional hours for students attending charter schools relative to similar students attending nearby traditional public schools. Solid bars indicate statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Grades 4–8 estimates are based on 569,774 student-year observations, and grades 9–11 estimates are based on 251,675 student-year observations.

# Implications

## The analysis suggests three key takeaways.

**First, banning, restricting, or limiting funding for charter schools that contract with for-profit management organizations could adversely impact the disadvantaged students that such schools primarily serve.** There are clear educational benefits of for-profit charter schools. Their average impact on student achievement is substantively and statistically greater than that of traditional public schools in the same geographic school district. These results hold even if we limit the analysis to for-profit charter schools that send nearly all their operating funds to their for-profit management organization. But we also don't know what other schools students would attend—or how effective they would be—if federal funding were denied to charter schools that use for-profit management organizations.<sup>31</sup>

Although not definitive, our analysis suggests some distinct advantages for charter schools managed by for-profit organizations. These schools tend to focus more on instruction versus administration, as they spend more on classroom activities and students experience more instructional hours. This pattern corresponds to economies of scale, as for-profit schools spend less on personnel, have higher student-teacher ratios, and have larger networks of schools than nonprofit schools, on average. The for-profit delivery-model—which appears to be less staff dependent—is more effective than the traditional public school system at educating low-achieving students when it comes to ELA and math content on standardized exams but perhaps less effective at promoting attendance and educational attainment.

**Second, virtual charters and charter schools that contract out almost all of their services to a for-profit organization may deserve extra scrutiny.** This analysis reveals that students in for-profit charter schools are more likely to be chronically absent than students in nonprofit charter schools or traditional public schools. This result is driven entirely by for-profit charter schools that send nearly all of their operating funds to their for-profit management organizations, which also have larger operator networks, more students per teacher, and more teacher turnover than nonprofit charter schools that contract with nonprofit operators.

In Appendix B, we also document the significant academic struggles of students in virtual schools—a finding that has been well documented in the literature. All virtual schools are, by definition, charter schools in Ohio, and they are also far more likely to be managed by for-profit organizations.

**Third, states should continue to expand high-quality charter schools, given their strong track record.** Ohio's charter schools, on average, cost less and outperform nearby traditional public schools with respect to student achievement, attendance, and disciplinary incidents. Although there's a perception that Ohio charter schools perform poorly compared to charter schools in other states,<sup>32</sup> evidence is mounting that Ohio's charters are good choices for many families.<sup>33</sup> As this study and our previous study on the topic have shown, students attending brick-and-mortar charter schools experience substantial improvements in math and reading achievement, increases in attendance rates, and declines in rates of chronic absenteeism and reported disciplinary incidents. Results show that the positive average impact of charter school attendance (relative to traditional public schools in the same geographic district) is not due to a few high-performing charter schools but the fact that charters are generally delivering above average results.



## Appendix A

In this appendix, we provide further detail about the statistical models employed in the body of the report, additional descriptive data, and extensions and robustness checks of the main analysis.

### Educational impact of schools serving grades 4–8

The data for grades 3–8 enable us to estimate the impact of attending a charter school on year-to-year changes (or “gains”) in student achievement, attendance, and disciplinary incidents for grades 4–8. The primary empirical strategy entails comparing year-to-year changes in these outcomes between students attending charter schools and those attending traditional public schools in the same school district—while accounting for observed differences between those students. To maximize sample size, results are based on statistical models estimated using all student outcome data observed in years 2016–19 and for the sixty-six districts in which charter schools with grades 4–8 are located. Detailed descriptive statistics are available in our prior report.<sup>34</sup>

We estimated the annual impact of attending a charter school—as opposed to attending a traditional public school—using the following Ordinary Least Squares (OLS) model:

$$y_{igdt} = \alpha_t + \beta_g + \mu_d + X'_{it}\theta + Charter'_{it}\tau + \epsilon_{igdt} \quad (A1)$$

where  $y_{igdt}$  is an outcome for student  $i$  in grade  $g$  and district  $d$  during school year  $t$ .  $\alpha_t$ ,  $\beta_g$ , and  $\mu_d$  are year, grade, and district fixed effects, respectively. The vector  $X_{it}$  includes a series of indicator variables capturing student demographic characteristics (race, sex, special education status, LEP status, and economic disadvantage status) in a given year ( $t$ ), a variable indicating whether a student received test-taking accommodations in that year ( $t$ ), cubic polynomials of standardized math and reading scores during the prior school year ( $t - 1$ ), a student’s attendance rate in the prior school year ( $t - 1$ ), and variables indicating whether a student had a disciplinary incident or was chronically absent during the prior school year ( $t - 1$ ). The vector  $Charter_{it}$  contains variables indicating whether student  $i$  attended each type of charter school (e.g., for-profit vs. nonprofit) during the school year.

The parameter  $\tau$  captures the causal impact of charter school attendance on student achievement and behavior if charter attendance is as good as randomly assigned, conditional on the covariates included in the model. In other words, the estimates are valid if statistical controls account for all observed and unobserved student characteristics that explain both charter school attendance and year-to-year changes in the outcomes. This conditional independence assumption is not testable, but there is good reason to believe that the estimates in this study are a close approximation of the true causal effect of attending a charter school. First, research has shown that within-district comparisons of student achievement gains using the above regression capture the causal impact of schools quite well. Second, removing student covariates other than lagged math and reading scores does not significantly affect the results. Third, as we show in our previous report, the results are similar when using other methods scholars have validated but that apply to a more limited sample.<sup>35</sup>

## Educational impact of schools serving grades 9–12

Analyzing outcomes in grades 9–12 presents some challenges because there is more student mobility and more variability in the curriculum to which students are exposed. For example, end-of-course exams do not test knowledge and skills based on standards clearly articulated across consecutive grades. Students take them in different grades, depending on when they take the relevant coursework. It is unclear how much of the “gains” to attribute to the year in which a student took the exam as opposed to prior years. Student mobility further complicates attempts to capture accumulating effects, as they may attend different school types in later grades.

To minimize these problems, we estimate the impact of attending a charter school (as opposed to a traditional public school) in grade 9 on student performance on end-of-course exams and, eventually, the ACT and graduation. Thus, a student’s ninth-grade school is effectively held accountable for all subsequent achievement and attainment. In order to account for potential differences between students who select into charter schools in grade 9, we control for student variables observed in grade 8 and test scores for both grade 8 and grade 7. Specifically, we estimate the overall impact of attending a charter school—as opposed to attending a traditional public school—using the following OLS model:

$$y_{igt} = \alpha_t + \beta_g + \mu_d + X_i'\theta + Charter_i'\tau + \epsilon_{igt} \quad (A2)$$

where  $y_{igt}$  is a test score or diploma indicator for student  $i$  in grade  $g$  in district  $d$  during school year  $t$ .  $\alpha_t$ ,  $\beta_g$ , and  $\mu_d$  are year, grade, and district fixed effects, respectively (note that we exclude grade fixed effects for models estimating graduation). The vector  $X_i$  includes a series of indicator variables capturing student characteristics in grade 8, including demographic indicators (race, sex, special education status, limited English proficiency, and economic disadvantage) and cubic polynomials of standardized math and reading scores in grades 7 and 8. The vector  $Charter_i$  contains a variable indicating whether student  $i$  attended a particular type of charter school serving a general student population in grade 9 (e.g., for-profit vs. nonprofit). Standard errors are clustered by school.

To estimate the impact of attending a charter school in grades 9–12 on annual attendance and disciplinary outcomes, we employ a running sum of the years spent in charter schools. Specifically, using the same sample of students observed in both grade 8 and grade 9, we estimated the following OLS model:

$$y_{igt} = \alpha_t + \beta_g + \mu_d + X_i'\theta + \tau S_{it} + \epsilon_{igt} \quad (A3)$$

The vector  $S_{it}$  contains running sums of time spent in various types of charters serving high school grades.

## For-profit/nonprofit comparisons within districts (Grades 4–8)

The analysis that directly compares charter schools with for-profit and nonprofit management organizations is limited to schools serving grades 4–8, as there are insufficient schools serving high school grades to permit school comparisons within the same geographic district. Nine districts had both for-profit-operated and nonprofit-operated schools serving grades 4–8. Table A1 lists those districts with charter schools that contribute to our estimates.

**Table A1. Districts with both for-profit-operated and nonprofit-operated charter schools that are brick-and-mortar and provide a general education**

Akron City	Euclid City
Cincinnati City	Lorain City
Cleveland Municipal	Toledo City
Columbus City	Youngstown City
Dayton City	

The model specification is also somewhat different than in equation A1 above. Specifically, the results we present are from models that control for school-level averages in lagged student achievement and student characteristics (e.g., percent economically disadvantaged), as the purpose of this analysis is to come as close as possible to estimating the pure effect of a school’s for-profit status—that is, holding constant all other factors that might influence a school’s impact on children, such as peer effects. Additionally, models are estimated such that charter schools with non-profit operators are the omitted category.

## Additional descriptive tables

Table A2 presents descriptive statistics for the charter schools observed in 2019 and included in our analysis. Unlike the body of the report, the staffing and finance data below are from the school budget forecasts that we used to examine school contracting practices. One advantage of the forecast data is that one can observe how much revenue is from both federal and state governments and from charitable contributions.

**Table A2. Characteristics of brick-and-mortar charter schools providing a general education**

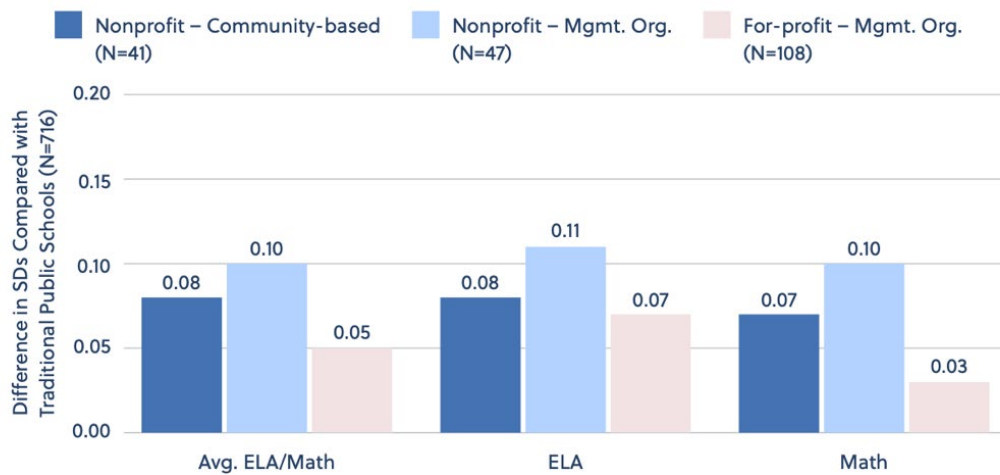
	Nonprofit – Community-based	Nonprofit – Mgmt. Org.	For-profit – Mgmt. Org.
<b>Structure</b>			
Percent of schools with elementary entry grades (grades K–4)	79	81	94
Percent of schools with high school terminal grades (grades 11–12)	35	15	8
Average number of years schools in operation	12	10	10
Average number of schools in operator network	N/A	10	15
<b>Revenues &amp; expenditures</b>			
Average receipts per pupil (2019 dollars)	10,930	11,490	10,841
Average percent of receipts from state per pupil funds	78	74	78
Average percent of receipts from federal grants	14	17	17
Average percent of receipts from donations	2	3	1
Average percent of operating expenditures for personnel	64	53	51
Average fund balance as percent of operating expenditures (i.e., cash on hand)	21	12	5
<b>Personnel</b>			
Average ratio of students to instructional staff	12	13	13
Average ratio of students to administrative staff	69	105	80
Average teacher pay (2019 dollars)	36,983	37,450	36,314
<b>Students</b>			
Average student count	336	334	292
Average percent minority	70	86	81
Average percent economically disadvantaged	83	94	93
Average percent with individual education plan (IEP)	14	12	17
Average percent limited English proficient (LEP)	5	11	7

**Note.** The table presents descriptive statistics for the 210 brick-and-mortar charter schools serving a general student population in 2019. These statistics are disaggregated based on whether the Ohio Department of Education identified schools as having no management organization, as contracting with a nonprofit management organization, or as contracting with a for-profit management organization. Finance and staffing data are from school budget forecast data, as opposed to the state-provided finance and FTE data in the body of the report. Calculations are unweighted, with each school observed once.

## Results comparing charters to traditional public schools in the same district

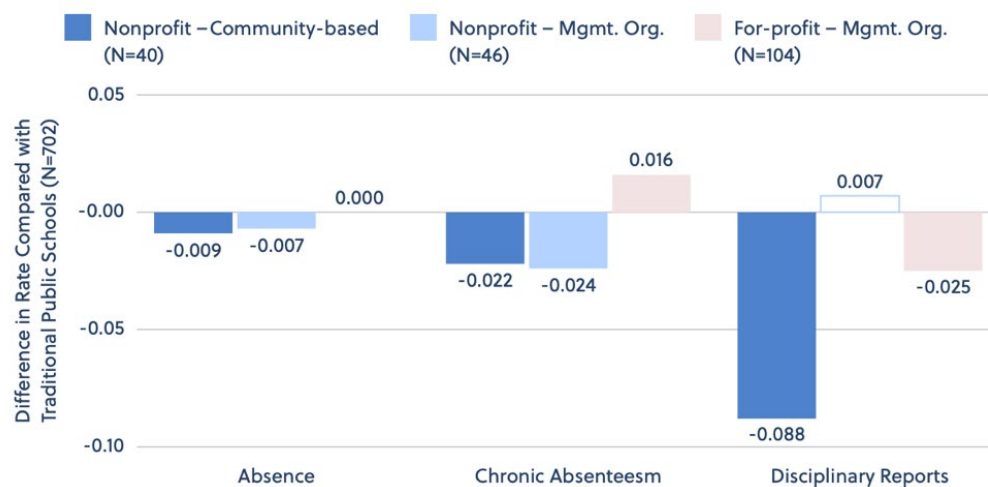
Figures A1 and A2 compare charter schools to traditional public schools operating in the same geographic school district. These figures focus on grades 4-8, but the results are similar for high school grades.

**Figure A1. Grades 4-8, annual achievement growth**



**Note.** The figure illustrates the annual impact of attending a charter school versus a traditional public school on student achievement growth in grades 4-8. Achievement growth estimates are in standard deviation units. Solid bars indicate statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Positive (negative) estimates indicate relative increases (decreases) in achievement for students attending charter schools as compared to similar students attending traditional public schools. Estimates are based on 570,830 student-year observations.

**Figure A2. Grades 4-8, annual changes in attendance and disciplinary reports**



**Note.** The figure shows the annual impact of attending a charter school (relative to a traditional public school) on student behavioral outcomes in grades 4-8. Positive/negative estimates indicate relative increases/decreases in absence rates, rates of chronic absenteeism, and the discipline rates for students attending charter schools compared to similar students attending traditional public schools. Solid bars indicate statistically significant estimates ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Estimates are based on 569,774 student-year observations.

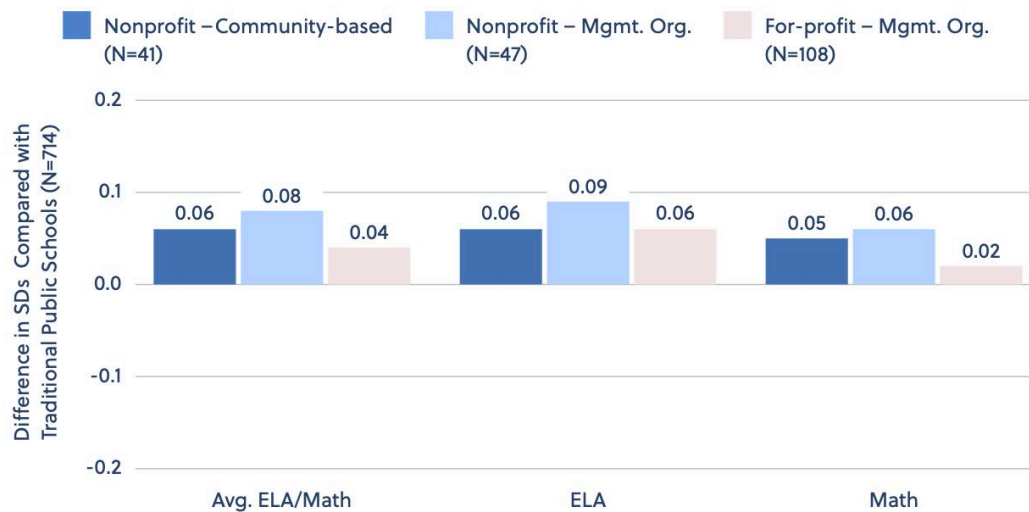
**Figure A3. Charters versus traditional public schools in same district (like Figures A1 and A2), disaggregated by for-profits with own staff versus for-profits that contract for staff.**



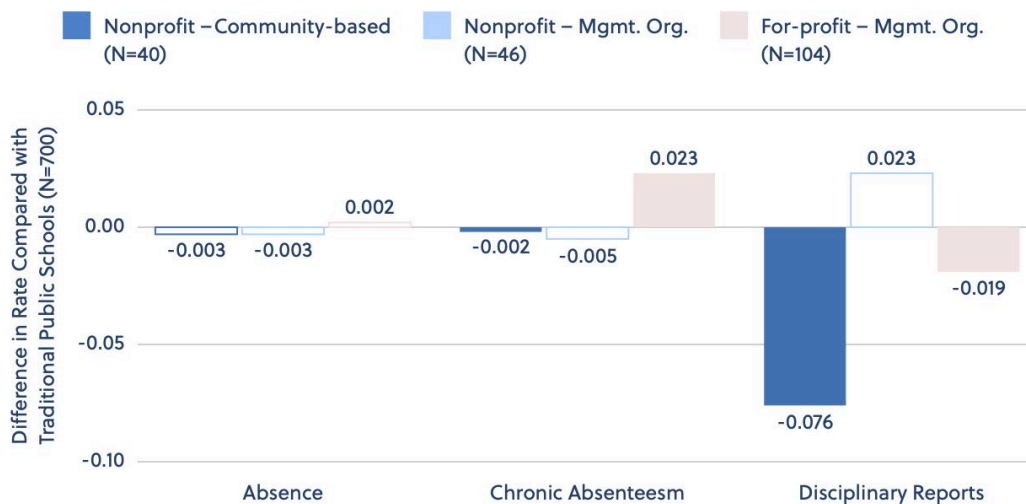
**Note.** Estimates are based on up to 591,265 student-year observations. Solid bars indicate statistically significant estimates ( $p < 0.10$  using a two-tailed test and clustering errors at the school level).

### Additional results and robustness checks

One might wonder whether the decline in disciplinary incidents is driven by peer effects, as opposed to factors such as schools' disciplinary practices. When we control for school-level variables capturing student characteristics from the year prior (e.g., average test scores and the proportion with various demographic characteristics), the achievement effects remain the same (see Figure A4) but the attendance-related benefits of nonprofit charter schools (relative to nearby traditional public schools) largely disappear (see Figure A5). The increase in chronic absenteeism among students in for-profit charter schools—relative to both traditional public schools and nonprofit charter schools—remains unchanged, however, which suggests that schools' practices drive the estimated effects.

**Figure A4. Grades 4-8, annual achievement growth**

**Note.** Replication of Figure A1 using models that control for school-level averages in baseline math and ELA achievement and fraction of students with each of the following characteristics: race, sex, special education status, LEP status, economic disadvantage status. Estimates are based on 567,832 student-year observations.

**Figure A5. Grades 4-8, annual changes in attendance and disciplinary reports**

**Note.** Replication of Figure A2 using models that control for school-level averages in baseline math and ELA achievement and fraction of students with each of the following characteristics: race, sex, special education status, LEP status, economic disadvantage status. Grades 4–8 estimates are based on 566,776 student-year observations.

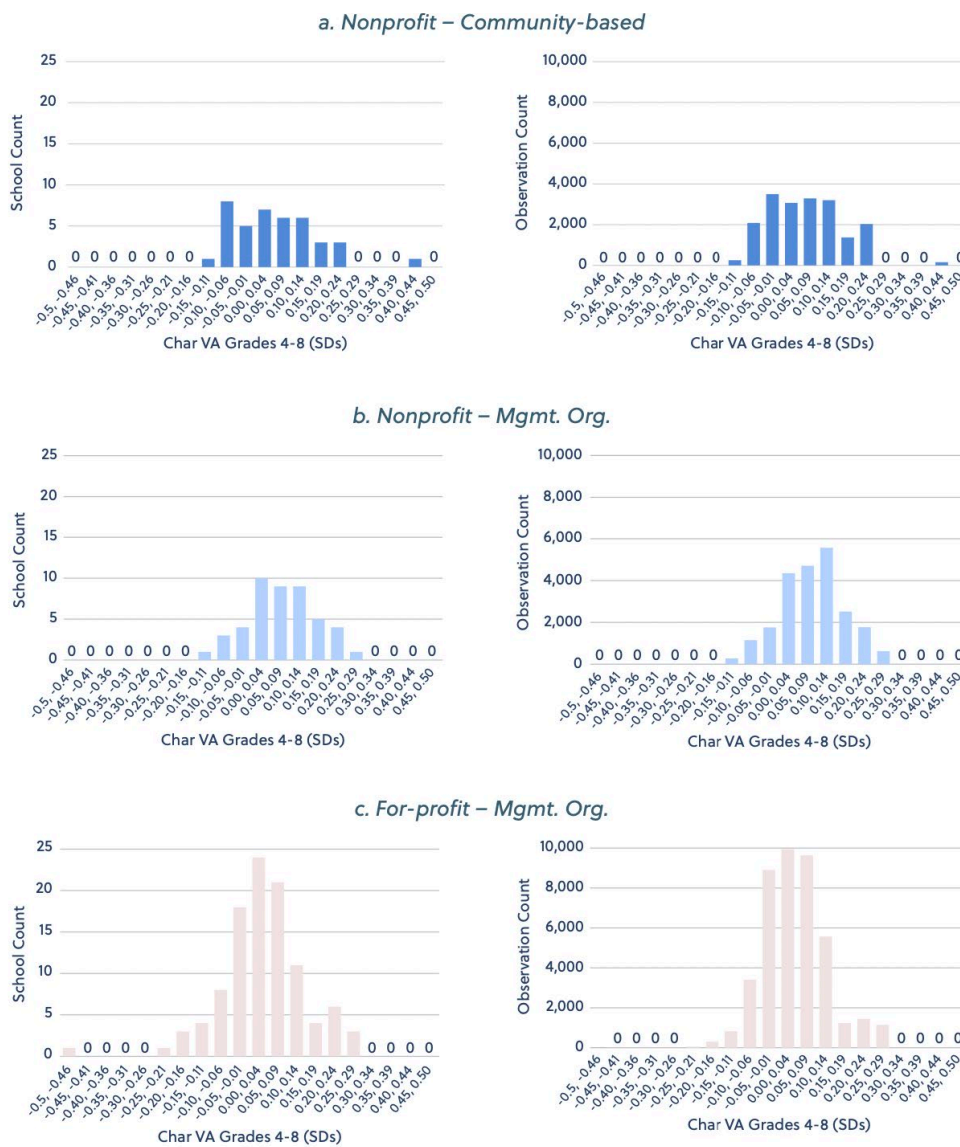
As an additional robustness check, we consider how student attrition might affect the achievement estimates. First, we were able to rule out the notion that testing rates—or rates of student attrition from the dataset—affected achievement estimates in grades 4–8. Testing rates exceed 95 percent in all school types, and back-of-the-envelope calculations indicate that differences in rates of untested students could not meaningfully affect the qualitative interpretation of the achievement effects. Additionally, although charter school students are more likely to switch schools or disappear from our public school dataset entirely, we find that the achievement gains of these students are not significantly

different than those of the charter school students who remain. Thus, in grades 4–8, differential attrition rates are unlikely to influence our results. But the case is not so clear-cut in high school grades.

### Distribution of school-level value-added

For all outcomes, we estimated school-level value-added effects and examined their distributions to determine whether our results are driven by outliers. Across all outcomes, we found that the relative effectiveness of charter schools was roughly normally distributed. The figures below illustrate the distribution of effects for grade 4-8 achievement models for which we have large samples (Figure A6).

**Figure A6. Distribution of school-level estimates (grades 4-8)**



**Note.** Presents the distribution of school-level value-added estimates in terms of the number of schools and the number of observations that contributed to schools' value-added estimates. Models control for baseline school-level average achievement and student demographic characteristics.



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## Appendix B: Analyses of virtual schools and dropout recovery schools

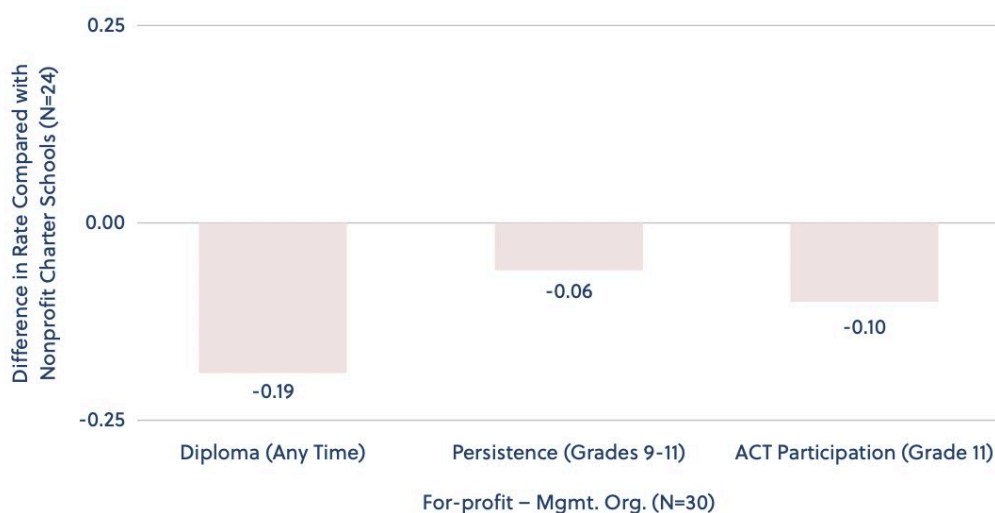
This appendix compares the impacts of virtual charter schools to traditional brick-and-mortar public schools, as well as for-profit dropout recovery schools and non-profit dropout recovery schools.

### Comparing for-profit dropout prevention and recovery high schools to nonprofit DPR high schools

About 20 percent of Ohio charter schools are “dropout prevention and recovery” (DPR) schools that primarily serve students deemed at risk of dropping out or who are behind academically due to personal crises, drug abuse, or extended absences from traditional public schools. Like virtual schools, these schools are all charter schools by law in Ohio. We have sufficient numbers of for-profit and nonprofit brick-and-mortar DPR schools to compare their relative educational effectiveness. But student mobility and high dropout rates present challenges when it comes to examining achievement and attendance in grades 9–12. For example, significant differences in student attrition makes the analysis of attendance and achievement outcomes in later grades highly suspect. Therefore, we focus on these schools’ impact on students’ persistence in grades 9–11 and, ultimately, the probability that they graduate with a high school diploma.

Figure B1 explores the association between attending a for-profit brick-and-mortar DPR charter school versus a nonprofit brick-and-mortar DPR charter school (both the nonprofit management organization and “community-based” variety) and the graduation, attrition, and test participation rates of students with similar characteristics in grade 8. Results suggest that for-profit charter schools may be less effective than nonprofit charter schools at serving students at risk of dropping out. Specifically, students in for-profit DPR schools are six percentage points more likely to exit the public school system in grades 9–11 and nineteen percentage points less likely to graduate with a high school diploma. The average graduation rate in the DPR sample is 47 percent, such that a nineteen-percentage-point decline represents a 40 percent decline in the probability of graduating.

There are challenges to estimating the effects of these schools,<sup>36</sup> and these results surely understate attrition because of the overrepresentation of students in younger grades. But it confirms that for-profit charter schools are not as successful as their nonprofit counterparts at preventing dropout—their *raison d’être*.

**Figure B1. Brick & mortar dropout prevention**

**Note.** The figure shows the association between attending a for-profit brick-and-mortar DPR charter school versus a nonprofit brick-and-mortar DPR charter school (both the nonprofit management organization and “community-based” variety) and the graduation, persistence, and test participation rates of students with similar characteristics in grade 8. Solid bars are statistically significant estimates ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Positive/negative estimates indicate relative increases/decreases in graduation, persistence, and test participation rates for students attending for-profit charter schools relative to similar students attending nonprofit charter schools. Estimates are based on 1,618 student-year observations.

## Student achievement growth in virtual charter schools relative to traditional brick-and-mortar public schools

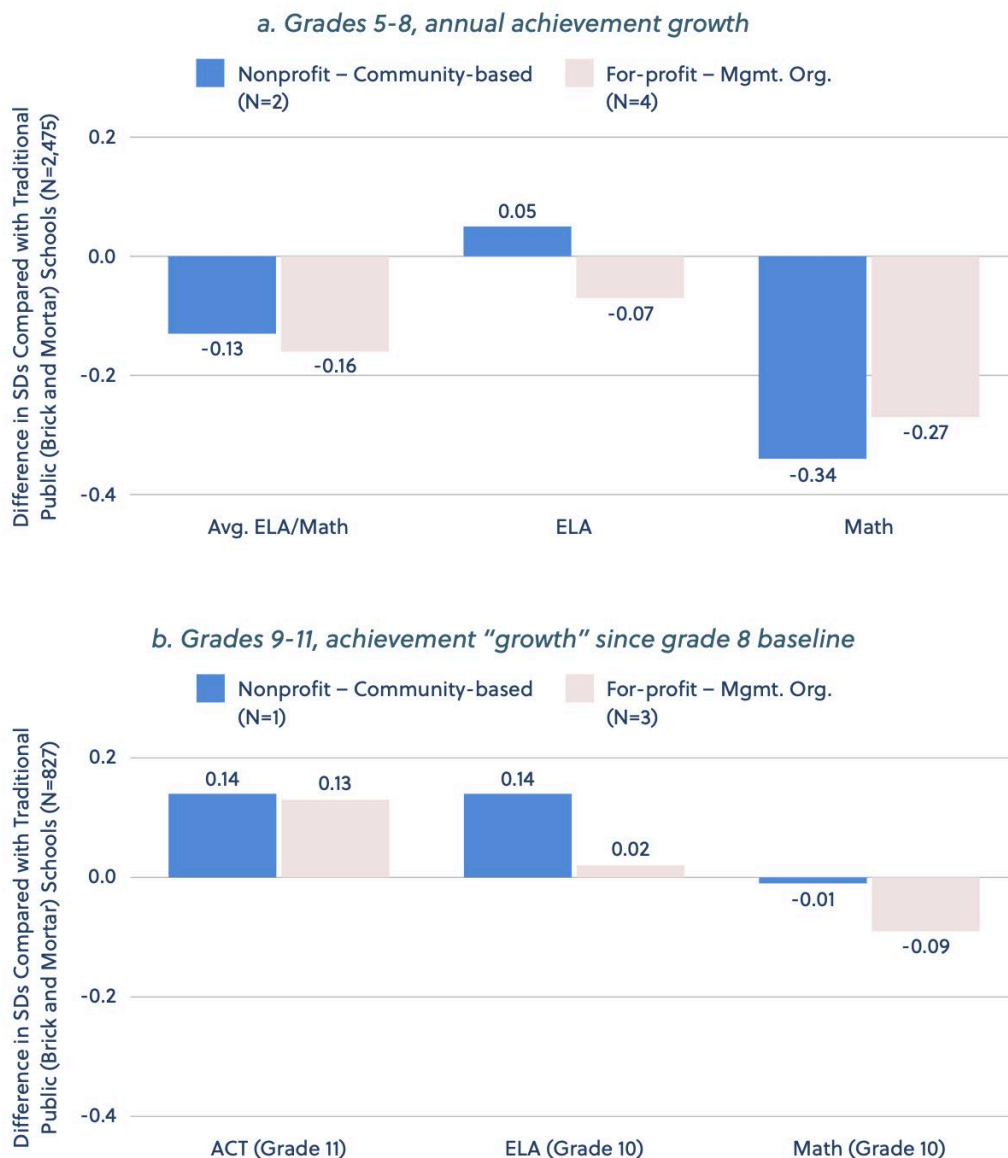
Analyzing outcomes for fully online, “virtual” charter schools presents significant challenges. By definition, all virtual schools in Ohio are charter schools. Given the significant differences between in-person and distance learning—which research has thoroughly documented—comparing virtual schools to brick-and-mortar schools is hazardous at best. Moreover, as of 2019, nearly all students in virtual schools were in for-profit schools that draw enrollments statewide. Specifically, four of the five virtual schools in existence were for-profit, and the sole nonprofit school (a community-based charter) had very small enrollments. Thus, there is no way to conduct an apples-to-apples comparison of nonprofit and for-profit virtual schools.

The best we can do is to compare the educational trajectories of students in virtual (charter) schools to those in traditional public schools, being careful not to attribute differences in those trajectories to whether they are charter schools or for-profit. To minimize the differences between students who opt for virtual schools versus traditional brick-and-mortar public schools, we control for two prior years of student achievement—test scores in grades 3 and 4 for the outcomes in grades 5–8 and scores in grades 7 and 8 for the outcomes in grades 9–12.

Figure B2 shows that students in virtual schools fall behind quickly in grades 5–8. The achievement declines are comparable to those attributable to online instruction during the pandemic, with particularly steep losses in mathematics compared to similar students attending traditional brick-and-mortar public schools.<sup>37</sup> There appear to be greater achievement gains in ELA—particularly in grades 9–11. But these may be cause for suspicion, since gains captured on college entrance exams do not reflect

reflect the average of achievement gains in grade 10 math and ELA exams for virtual schools, as they did in the main analysis of brick-and-mortar schools (above).

**Figure B2. Elementary school students in virtual charter schools fall behind quickly relative to students in traditional brick-and-mortar public schools, but there may be achievement benefits for students who persist through high school.**

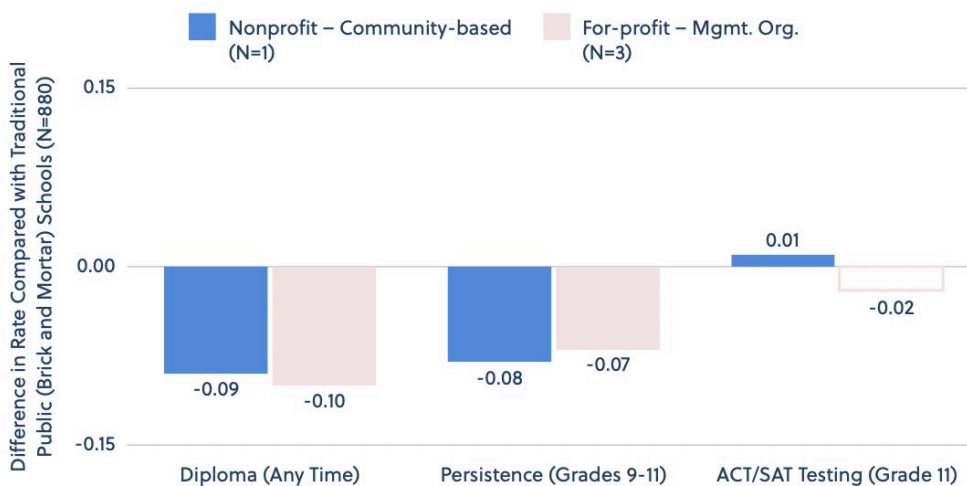


**Note.** The figure shows the differences between high school students attending virtual charter schools and traditional public schools in annual student achievement growth in grades 5–8 and in growth since eighth grade. Achievement estimates are in standard deviation units. Solid bars are statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Positive/negative estimates indicate relative increases/declines in achievement for students attending virtual charter schools compared to similar students in traditional brick-and-mortar public schools. Grades 5–8 estimates are based on 1,667,764 student-year observations, and grades 9–11 estimates are based on 166,241 student-year observations.

Figure B3 shows that students in virtual schools are just as likely to take the ACT or SAT in grade 11 as similar students (based on observed characteristics in grades 7–8) in traditional public schools, which suggests differences in learning gains are not due to differences in student composition. Students in virtual schools are also far more likely to exit the public school system in grades 9–11 and are far less likely to graduate.

Overall, the results suggest that students enrolled in virtual schools fall behind very quickly compared to similar students in traditional brick-and-mortar public schools—particularly in mathematics.<sup>38</sup>

**Figure B3. Students enrolled in virtual charter high schools are less likely to graduate and more likely to leave public schools by grade 11 compared to students in nonprofit charters and traditional public schools, but comparable students in all schools are just as likely to take the ACT or SAT in eleventh grade.**



**Note.** The figure illustrates the differences in the graduation, persistence, and test participation rates between students attending virtual charter schools relative to students attending traditional public schools. Solid bars are statistically significant differences ( $p < 0.10$  using a two-tailed test and clustering errors at the school level). Positive/negative estimates indicate relative increases/decreases in graduation, persistence, and test participation rates for students attending virtual charter schools relative to similar students attending traditional brick-and-mortar public schools. Estimates are based on 366,062 student-year observations.

## Endnotes

1 In particular, the 2020 Democratic Party platform states, “We will ban for-profit private charter businesses from receiving federal funding.” See Democratic National Committee, “2020 Democratic Party Platform,” accessed April 28, 2021, <https://democrats.org/where-we-stand/party-platform>.

2 In Arizona, for-profit organizations are permitted to hold a school’s charter.

3 Only 12 percent of charter schools nationwide have for-profit operators, and 80 percent of these schools are in four states: Arizona, Florida, Michigan, and Ohio. Kat Sullivan, “Are Charter Schools For Profit?” National Alliance for Public Charter Schools, January 16, 2019, accessed April 28, 2021, <https://www.publiccharters.org/latest-news/2019/01/16/are-charter-schools-profit>.

4 Network for Public Education, *Chartered for Profit: The Hidden World of Charter Schools Operated for Financial Gain* (New York, NY: Network for Public Education, 2021), <https://networkforpubliceducation.org/chartered-for-profit>.

5 The lone exception is Arizona, where for-profit organizations are permitted to hold a school’s charter.

6 Stéphane Lavertu, *The Impact of Ohio Charter Schools on Student Outcomes, 2016–19* (Columbus, OH: Thomas B. Fordham Institute, October 2020), <https://fordhaminstitute.org/ohio/research/impact-ohio-charter-schools-student-outcomes-2016-19>. The report also documented notable improvements in the charter school sector as a whole from 2016 to 2019, which stems primarily from state actions that have led to declining enrollments in for-profit virtual schools. Most notably, the Ohio Department of Education’s demand for a refund of \$80 million from the virtual school Electronic Classroom of Tomorrow (ECOT) led to that school’s closure. Similarly, 2015 reforms greatly strengthened a state accountability system that now holds a charter school’s authorizer responsible for poor academic performance, and which imposed further regulations to enhance the transparency of charter school finances. This report did not examine differences in administrative practices between for-profit and nonprofit schools, impacts in high school, or outcomes other than math and ELA achievement.

7 Center for Research on Education Outcomes, *Charter Management Organizations 2017* (Stanford, CA: Center for Research on Education Outcomes, 2017), <https://credo.stanford.edu/report/charter-management-organizations>. Since for-profit organizations are more likely to operate online or “virtual” charter schools, it may be that for-profit operators appear less effective because of the difficulties associated with distance learning.

8 Susan Dynarski, Daniel Hubbard, Brian Jacob, and Silvia Robles, “Estimating the Effects of a Large For-Profit Charter School Operator” (working paper No. 24428, Cambridge, MA, National Bureau of Economic Research, March 2018), doi:10.3386/w24428.

9 John D. Singleton, “Putting dollars before scholars? Evidence from for-profit charter schools in Florida,” *Economics of Education Review* 58 (June 2017): 43–54, doi:10.1016/j.econedurev.2017.03.004. Also see Cynthia D. Hill and David M. Welsch, “For-Profit Versus Not-for-Profit Charter Schools: An Examination of Michigan Student Test Scores,” *Education Economics* 17, no. 2 (June 2009): 147–66, doi:10.1080/09645290801977017, and Tim R. Sass, “Charter Schools and Student Achievement in Florida,” *Education Finance and Policy* 1, no. 1 (2006): 91–122, doi:10.1162/edfp.2006.1.1.91.

10 Cellini’s (2021) review of sectorial differences in higher education indicates that students in for-profit colleges have lower future earnings and employment rates than similar students in nonprofit colleges. But there are more extensive financial regulations and more robust accountability systems in the K–12 public charter school sector than in postsecondary education. Stephanie Riegg Cellini, “For - Profit Colleges in the United States: Insights from Two Decades of Research,” in *The Routledge Handbook of the Economics of Education*, edited by Brian P. McCall (London: Routledge, 2021).

11 Throughout this report, academic years are referred to by their spring terms—e.g., 2018–19 is referred to as “2019.”

12 For example, traditional public high schools are typically stand-alone schools serving grades 9–12 exclusively, and they are often much larger and spend more per pupil than elementary schools. High school grades also pose analytical challenges such as student attrition and irregular testing schedules, which are not as big an issue in elementary grades. Additionally, we limit the achievement analysis to grades 4–11 (due primarily to limitations in

the availability of test data) and estimate impacts on high school graduation rates based only on a student's high school experience beginning in grade 9 (due to limitations in the availability of historical data). Finally, although we focus on schools in operation during the 2019 school year, the analysis of educational impacts examines student outcomes across four school years (2016–19) to increase statistical precision.

13 We illustrate this symmetry in the final part of Appendix A, which presents the distribution of charter school achievement gains estimates for math and ELA in grades 4–8 (Figure A5) and for the ACT among students we observe in charter schools in grade 9 (Figure A6). The figures reveal that the distributions become more normal when we weight them by student counts (which is what our main analysis effectively does), and it illustrates how much more symmetric and approximately normal the distributions when we have a lot of data (estimates for grades 4–8), as compared to the analysis in which we have little data (ACT estimates for grade 11).

14 Specifically, we obtained from the Ohio Department of Education schools' May 2019 forecasts, so that they capture information through the end of the 2018–19 school year—the last year for which we have the necessary student-level outcome data. We coded, validated, and combined these 2019 forecast data and ultimately ended up with a school-level dataset of financial information for 313 charter schools in operation during the 2019 school year. These forecasts include detailed budget information, including spending for “purchased services” (e.g., how much schools paid vendors for transportation, food, management, and personnel services). These data also include historical budget information by function for the 2016–18 school years, which Ohio directs schools to use in generating their financial projections. For more details, see Stéphane Lavertu and Travis St. Clair, “Beyond spending levels: Revenue uncertainty and the performance of local governments,” *Journal of Urban Economics* 106 (2018): 59–80, doi:10.1016/j.jue.2018.06.003.

15 They report these data according to a coding scheme developed by the Ohio Auditor of State. This scheme requires reporting by fund (e.g., restricted state grants), function (e.g., classroom instruction), and object (e.g., specific goods and services).

16 First, we compiled the Ohio Department of Education's charter school annual reports (2015–19), which indicate the districts in which charter schools are located, the students they serve (e.g., “general” vs. “special education”), and whether they are virtual “e-schools” or brick-and-mortar “site-based” schools. Second, we obtained from the Ohio Department of Education their determination of which school management organizations are for-profit and nonprofit, which they submit to the U.S. Department of Education annually. Third, we employed both federal Common Core data and state data to calculate student-teacher and student-staff ratios based on student and staff “full-time equivalent” (FTE) units. Fourth, we obtained restricted-use teacher-level data that indicate the school buildings in which they work, annual salary, education level, and years of experience. We used these teacher-level data to create school-level variables that we included in our school-by-year dataset.

17 Indeed, because there is considerable variability in the timing of tests in high school (particularly the Algebra exam, which students often take in grade 8, 9, or 10, depending on their coursework), the analysis of achievement in high school grades focuses on students who took tests in the modal grade (ELA II and Geometry in grade 10 and the ACT in grade 11). As the analysis shows, the probability that observationally similar eighth-grade students take those tests in modal grades (particularly ELA II and ACT) is comparable across school types. Additionally, because a small minority of students take the SAT instead of the ACT (which also fulfills Ohio's requirement that they take a college entrance exam), the analysis analyzes ACT scores for which we imputed missing values using the student's SAT score—based on publicly available 2016–19 conversion charts. Finally, unlike the state math and ELA exams in grades 3–10, we normalize the ACT effect estimates based on the national standard deviation on that exam.

18 A student's district of residence is arguably better for estimating impacts of charter schools on educational outcomes, as students may attend charter schools in a different district than the one in which they reside. Unfortunately, students' districts of residence was not in the dataset used for this analysis. However, in other analyses using ODE data, the authors found that which district one accounts for (district of residence or district of attendance) has no substantively significant impact on the results once one controls statistically for students' prior test scores and baseline demographic characteristics.

19 Importantly, all estimates are from statistical models that econometricians have endorsed for these types of schools and pupil populations, and the results are generally insensitive to model specification. For example, we find that the results are insensitive to our inclusion of multiple years of test score lags (e.g., controlling for both seventh- and eighth-grade test scores in the high school analysis), although including more lags increases the precision of our estimates. The Fordham Institute's 2020 report on Ohio charter schools also reveals that the specific statistical models used in this report yield results comparable to other common statistical approaches

(see Stéphane Lavertu, *The Impact of Ohio Charter Schools on Student Outcomes, 2016–19*). Some readers might be concerned that charter schools' relative effectiveness may stem not from the impact of their educational practices but from the superior educational environment students enjoy because they are surrounded by relatively motivated peers. To address this possibility, we also reestimated all models while controlling for school-level averages in baseline student achievement and demographic characteristics. As we discuss, doing so has virtually no impact on the estimated effects of charter school attendance on student achievement, but it appears to have some effect on behavioral outcomes such as attendance rates.

20 Research indicates that comparing changes in outcomes among observationally similar students should yield credible estimates of the effects of charter school attendance among students attending schools in the same district. But estimates could be inaccurate if comparing students across district boundaries or those in unusual circumstances. For example, most Ohio charter schools that focus on student populations with special needs have no natural comparison groups among traditional public schools. Indeed, all Ohio schools that focus on DPR are charter schools. The students they serve are different by definition. Similarly, the unmeasured factors that lead students to select into online "virtual" schools—all of which Ohio law labels as charter schools and most of which draw students statewide—are also likely to make them significantly different from traditional public school students attending brick-and-mortar schools.

21 We can only observe how much schools send to their operators for personnel services—we cannot distinguish between types of personnel (e.g., teachers). However, because nearly all schools either contract for all or none of their personnel services, those with personnel costs expended primarily through the operator must contract for personnel staff. We read a sample of operator contracts and confirmed that this indicates that staff are the formal employees of the for-profit management organization.

22 The forecast data are not thoroughly validated by the state. Indeed, we discovered some inaccuracies in the data on "purchased services," which we used to distinguish between schools that contract out a lot or a little. Nevertheless, these data seem to generally correspond to the contents of management organization contracts. Contracting data only tell us how much goes to the management organization—not whether the organization, in turn, contracts with for-profit vendors for particular services. Thus, only the contracting data for for-profit-operated schools provides insights on schools' reliance on for-profit organizations.

23 As in Table 3, the results are weighted by student enrollment, and statistically significant differences are bolded and starred. Some of the variables differ, however, as they are from charter-specific data files.

24 Note that budgeting and staffing results are based on self-reported data that are not all thoroughly validated by the state.

25 There are nine Ohio school districts in which we observe charter schools with nonprofit and for-profit operators (see Table A1 in Appendix A). Unfortunately, we have insufficient observations to conduct this analysis for charter schools serving high school grades.

26 We also conducted this grade 4–8 analysis in our comparisons to traditional public schools, but the results were similar and only available for grades 4–8 (see Table A3 in Appendix A). Thus, in the interest of space, we present this disaggregated analysis only in this section.

27 As in the previous analysis, accounting for school-level averages in student characteristics has little impact on the achievement estimates.

28 As we report previously, these differences are less pronounced when accounting for the average baseline characteristics of a school's student body (as we do in Figure 8), but they are nonetheless

29 Lavertu, 2020.

30 Assuming there is no fade-out over time, the achievement results in Figure 5 imply that if a student attended a for-profit charter school for all grades 4–8, their average achievement in mathematics and ELA would be approximately 0.25 standard deviations greater ( $0.05 \times 5$  years) than it would have been had they attended a traditional public school. These results imply that, on average, attending a charter school for five years (from grades 4–8) moves the typical student in a for-profit charter from approximately the thirtieth percentile on statewide mathematics and ELA exams to approximately the fortieth percentile. For nonprofit charter schools, the impact of attending all five years in grades 4–8 is equivalent to moving from roughly the thirtieth percentile to the forty-fifth percentile and equivalent to moving from roughly the thirty-fifth percentile in grade 8 to the fortieth percentile in grade 11.

31 For example, in a prior study, we found that whether the closure of charter schools harmed or benefited students depended on the quality of nearby public schools. Deven Carlson and Stéphane Lavertu, *School Closures and Student Achievement: An Analysis of Ohio's Urban District and Charter Schools* (Columbus, OH: Thomas B. Fordham Institute, 2015), <https://fordhaminstitute.org/ohio/research/school-closures-and-student-achievement-analysis-ohios-urban-district-and-charter>. Also see Deven Carlson and Stéphane Lavertu, "Charter school closure and student achievement: Evidence from Ohio," *Journal of Urban Economics* 95 (2016): 31–48, doi:10.1016/j.jue.2016.07.001.

32 This perception is largely due to CREDO's reports on Ohio charter schools, which reported the combined effects of virtual and brick-and-mortar charter schools.

33 Stéphane Lavertu, *The Impact of Ohio Charter Schools on Student Outcomes, 2016–19*.

34 Ibid.

35 Ibid.

36 There are very few students included in the graduation analysis for DPR schools (just 364), and there is significant delay in our ability to observe this outcome. Thus, it may not capture the contemporary impact of for-profit DPR schools serving grades 9–12. The analysis of persistence rates in grades 9–11 provides a more recent snapshot and includes more students. The average attrition rate is around 46 percent in our sample, which means the increase of six percentage points among for-profit charter schools represents an increase of 13 percent in student attrition in grades 9–11.

37 Vladimir Kogan and Stéphane Lavertu, *How the COVID-19 Pandemic Affected Student Learning in Ohio: Analysis of Spring 2021 Ohio State Tests* (Columbus, OH: The Ohio State University, 2021), <https://glenn.osu.edu/how-covid-19-pandemic-affected-student-learning-ohio>.

38 The annual achievement decline of approximately 0.15 standard deviations (across math and ELA) is equivalent to students losing approximately eighty days' worth of instruction annually. Assuming no fadeout, that implies that students would lose almost two full years' worth of learning if they were enrolled in virtual schools from grades 5–8. They are also approximately 10 percent less likely to receive a high school diploma. The students who persist may actually fare better than their traditional public school counterparts—as evidenced by the higher ACT scores—but many students may be left behind in the process.