



# Serving Their Share:

## Some Colleges Could Be Doing a Much Better Job Enrolling and Graduating Low-Income Students

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Higher education is a crucial pathway to social and economic mobility. Yet many of the public universities that should be helping students move forward are instead failing to enroll enough low-income undergraduates. As a result, tens of thousands of young people are missing their first, critical step toward opportunity. And our nation is missing the economic and societal benefits that a more educated populace affords. With broad recognition of this need for a college-educated citizenry, cities, states, institutions, and the president<sup>2</sup> himself have set college attainment goals—goals that rely on improvements in both college access *and* success. From Lumina Foundation<sup>3</sup> to the state of Tennessee,<sup>4</sup> leaders have set ambitious targets to build a more educated workforce and society.

Reaching these goals will be no small feat. It will entail setting high expectations in our elementary and secondary schools and supporting students and teachers to meet those expectations. It will require stable public investment at the state and federal level. It will demand innovation and excellence from our nation's colleges and universities. And it will rely on access and success for the very students our postsecondary system has too often left behind—low-income students, students of color, and first-generation college-goers.

Many of the latest college attainment efforts have focused on improving success rates for underserved students, with the assumption that we have “fixed” the college access problem. Indeed, college-going rates have increased. Yet, gaps remain, leaving the access problem far from solved. Only about half of low-income high school students enroll in college—a rate that high-income students eclipsed nearly *four decades ago*.<sup>5</sup> Low-income students who do enroll tend to be concentrated in less selective colleges with fewer resources and lower graduation rates.<sup>6</sup>

While gaps in academic preparation play some role in this stratification, research shows that many high-achieving, low-income students are not enrolling in selective colleges, which may offer them the best chance of success.<sup>7</sup> Institutional characteristics matter immensely for low-income students, who see a 34 percentage point boost in graduation rates when they attend a highly selective institution instead of a nonselective college; high-income students experience only an 8 percentage point increase.<sup>8</sup> These completion gaps have a real impact: the Georgetown University Center on Education and the Workforce estimates that each year 240,000 high-achieving, low-income high school graduates do not go on to graduate from a two- or four-year college, despite their qualifications.<sup>9</sup>

These lost opportunities demand a refocus on equity in college access.<sup>10</sup> We investigated which institutions are underserving low-income students, compared with those that exceed expectations. Through this research it became clear that while challenges abound for many colleges, the more successful ones have tackled hurdles head-on in notably similar ways.

### Which institutions could be doing a better job of enrolling and graduating more low-income students?

The answer to that question can be derived from data in *Washington Monthly's College Guide*, which calculates a predicted Pell enrollment rate.<sup>11</sup> This statistic compares the percentage of students enrolled at a given college who are eligible for a federal Pell Grant with the percentage who would be statistically expected to enroll, given the college's selectivity. Importantly, this calculation does not suggest that every selective college must enroll huge proportions of low-income students—only as many as other, academically similar colleges have already enrolled. We took that predicted Pell enrollment rate for each institution, compared it with the institution's actual Pell enrollment rate to calculate a Pell enrollment gap, and applied the college's graduation rate (see Box 1 for more methodological details). This analysis allowed us to estimate how many additional Pell students a particular college could graduate without changing its admissions standards—in other words, the college's “fair share” of qualified, low-income students.

A college can increase its Pell enrollment rate—and close its Pell enrollment gap—in two ways: by maintaining the size of an entering class, but *shifting* enrollment toward more Pell students; or by adding Pell students to *grow* overall enrollment. In reality, a college likely increases its Pell enrollment rate through some combination of these two approaches. We present both calculations in Table 1, but focus primarily on the more conservative “shift” estimate because some institutions may feel they do not have the capacity to increase overall enrollment by several hundred students per year. For more details, see Box 1.

It turns out that despite high performance in well-known college rankings, many selective institutions do not enroll nearly as many low-income, Pell Grant-receiving students as they could. The colleges with the greatest potential to graduate more Pell Grant recipients—those we deem as “Potential Contributors”—tend to be large public universities with high graduation rates, large overall enrollments, and few Pell Grant recipients relative to their size. Although these institutions already enroll thousands of Pell Grant recipients, they do not enroll as many as they could based on other institutions' enrollment patterns. For example, Penn State's main campus—University Park—enrolls about 1,116 full-time freshman Pell recipients each year, which accounts for only 15 percent of the full-time freshman class. If the University Park campus did not increase in size, but shifted its enrollment profile to meet its predicted Pell enrollment rate of 29 percent (almost twice the rate it enrolls now) and maintained its high completion rate, it would graduate over 900 more Pell recipients each year. If instead Penn State increased its overall enrollment exclusively by enrolling more low-income students, it could graduate 1,300 additional Pell recipients.

## BOX 1: Methodological Details—How to Calculate Pell Completer Increases

Like the *Washington Monthly* rankings, this analysis focuses only on four-year institutions that receive Title IV aid and primarily award bachelor's degrees. The predicted Pell enrollment rate is determined by a regression that accounts for the percentage of students an institution admits each year, the median ACT (or SAT equivalent) score of entering students, and the institution's Carnegie classification. While *Washington Monthly* calculates a percent Pell among all undergraduates, we calculate the predicted Pell enrollment rate for first-time, full-time students to align with the Integrated Postsecondary Education Data System (IPEDS) graduation rate cohort, also used in our analysis. The graphic on the next page displays the two ways we calculated potential Pell completion based on the predicted Pell enrollment rate (Figure 1).

In using the IPEDS graduation rate, we assume that low-income students graduate at the same rate as their higher income peers. Institution-level data on graduation rates of Pell Grant recipients, which would allow for more precise calculations, were not available at the time of this analysis. However, even if these data were available, our analysis focuses on using higher education as an engine of equality. So, while on average, low-income students graduate at lower rates than high-income students, evidence on graduation rates by race/ethnicity shows that graduation-rate gaps between underserved students and their classmates are not immutable.<sup>12</sup> To truly drive equitable college outcomes, we should expect institutions to provide the necessary support to *all* students to graduate at equal rates.

Such an increase in Pell enrollment and completion could have notable results for our national attainment goals. By opening their doors to more low-income students while maintaining their already high graduation rates, the top 10 Potential Contributors (see Table 1) alone could graduate between 4,200 and 6,000 more low-income students each year—without altering their admissions standards. Although some of these low-income students would have graduated elsewhere, many would not have attended college at all or would have attended a less selective institution that provided a far lower chance of graduation.

In fact, if the 820 four-year institutions on our list that are underperforming on their predicted Pell enrollment rate increased their actual Pell enrollment to match the predicted rate, between 35,000 and 57,500 additional Pell students would graduate each year. Certainly, some of these Pell recipients could be enrolling and graduating elsewhere. However, given the evidence of substantial graduation gains that low-income students experience by attending selective institutions, we can assume that even shifting current college-goers to more selective colleges would increase attainment.<sup>13</sup>

### The challenges: Real and perceived reasons for low Pell enrollments

Why are some universities enrolling so few low-income students? We decided to ask them directly. Their answers provide a glimpse into the organizational dilemmas of these institutions that could be enrolling and graduating more low-income students. Leaders at several Potential Contributors cite competing priorities that impact their Pell enrollment rates, including gaps in college readiness, budget constraints, high

nonresident enrollments, geographic isolation, and campus differentiation within a large system.

Two Indiana institutions noted that tensions can arise between budget constraints, access policies, and out-of-state enrollments. An administrator at Purdue University noted that 28 percent of Indiana residents enrolled there are Pell recipients, while only 8 percent of nonresidents receive Pell Grants. “Our financial aid budget is finite, and our priority for its use is ensuring that Purdue is financially accessible to Indiana students from every income level,” she stated. She also expressed that high school graduates in Indiana “are not as prepared to be as successful in college as we would like them to be,” especially in math, and noted that postsecondary institutions in the state have more seats than qualified in-state students to fill them, leading the university to recruit nonresident students to meet enrollment and revenue targets.

Research from New America has identified shifts toward more out-of-state students at many public institutions.<sup>14</sup> Indeed, a representative from Indiana University–Bloomington also mentioned out-of-state students, noting that the school's relatively low Pell enrollment is largely due to the fact that 38 percent of its student body are nonresidents. He did not name academic preparation as a challenge, but did acknowledge that Indiana's demographics are changing, creating opportunities for the flagship to increase diversity on campus: “In the mix of recruiting students, and admitting and enrolling students, we are looking at academic quality, diversity, and affordability. These are complementary goals, but sometimes these complementary goals can be competing, and so we work to try to balance that out.”

**Figure 1: Two Ways to Increase Pell Enrollment**

Here, we look at how a hypothetical institution, Contributor University, could increase its Pell enrollment by either maintaining the size of its incoming class and increasing Pell enrollment, or by increasing the overall size of the cohort, with additional students being Pell recipients.

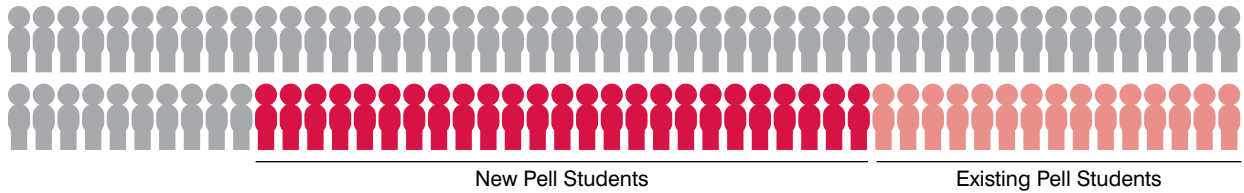
**Current Enrollment Profile**

On average, Contributor University enrolls 100 full-time freshmen each year, but only 15 receive a Pell Grant. Its Pell Rate is 15%, but based on its selectivity, 40% of its students could receive a Pell Grant.



**Option 1: Shift Enrollment Toward Pell Students**

If Contributor University decides to shift its enrollment toward Pell students, it would replace 25 of the non-Pell students in its entering cohort with Pell students, bringing the total to 40 Pell students. Pell students would then make up 40% of the entering class.

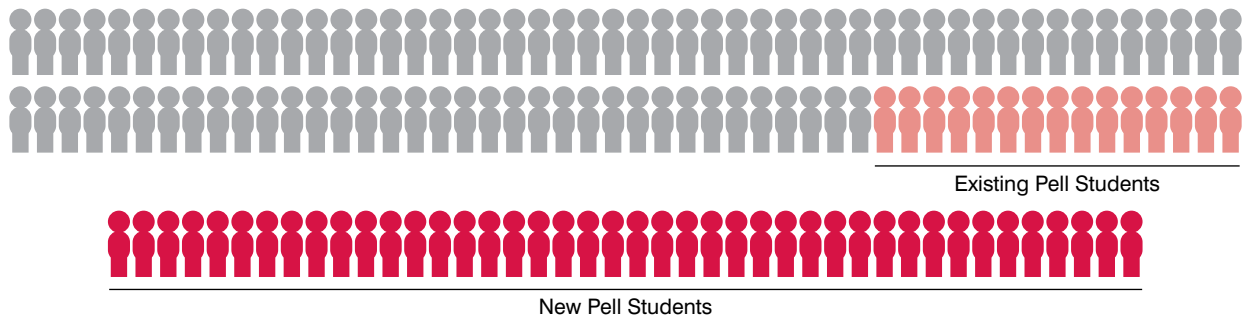


Contributor University's six-year graduation rate is 80%. If the additional 25 Pell students graduate at the same rate, Contributor University would graduate an additional 20 Pell students each year.



**Option 2: Increase Overall Enrollment with Pell Students**

If Contributor University decides to increase the size of its incoming class, it can enroll more Pell students to meet its Predicted Pell Enrollment Rate of 40%. It would have to add 42 more students to its cohort ( $(42 + 15) / 142 = .4$ ).



If the new Pell students complete at Contributor University's six-year graduation rate of 80%, Contributor University would add 34 more Pell graduates each year.



**Table 1: Potential Contributors**

Colleges That Could Graduate Far More Pell Grant Recipients by Increasing Access for Low-Income Students

Institution Name	CONTEXT				PELL CONTRIBUTIONS							
	State	Percent Pell Enrollment Among All Institutions in State	Net Price for Low-Income Students	Median ACT Score	Predicted Pell Enrollment Rate	Actual Pell Enrollment Rate	Pell Enrollment Rate Gap (Predicted-Actual, pct. pts.)	Pell Enrollment Gap (# of Pell recipients)	Six-Year Graduation Rate	Additional Pell Completers with Enrollment Shift	Additional Pell Completers with Enrollment Growth	Actual Percent Pell Increase, 2008–2013 (pct. pts.)
Pennsylvania State University–Main Campus	PA	41.5%	\$17,881	26	29.7%	15.0%	14.7	1,081	86%	930	1,322	1
University of Delaware	DE	41.7%	\$9,906	26	28.1%	13.0%	15.1	611	80%	489	680	5
Indiana University–Bloomington	IN	42.8%	\$4,426	25	28.4%	20.0%	8.4	618	75%	462	645	6
University of Alabama	AL	52.5%	\$15,542	26	30.3%	19.7%	10.6	628	67%	418	600	5
Purdue University–Main Campus	IN	42.8%	\$6,873	26	27.7%	19.7%	8.0	527	69%	365	505	3
James Madison University	VA	38.8%	\$9,807	25	24.1%	13.3%	10.8	447	81%	361	475	3
Virginia Polytechnic Institute and State University	VA	38.8%	\$11,114	27	22.5%	15.0%	7.5	393	83%	325	419	5
San Diego State University	CA	52.3%	\$5,038	23	45.1%	31.3%	13.8	474	66%	313	570	15
Towson University	MD	44.2%	\$8,633	23	38.7%	21.7%	17.1	421	65%	273	446	6
Texas Tech University	TX	54.5%	\$8,449	24	35.3%	25.3%	10.0	435	61%	264	407	5
Average	—	49.0%	\$9,767	25	31.0%	19.4%	11.6	563	73%	420	607	5.4

Source: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS). Note: Median ACT Score, Actual Pell Enrollment Rate, Six-Year Graduation Rate, Net Price for Low-Income Students, and Percent Pell Enrollment Among All Institutions in State are averages of the 2011, 2012, and 2013 data to adjust for variation over time.

It’s certainly true that these Indiana schools have aggressively recruited out-of-state and international students, who typically pay upward of \$28,000 in annual tuition—far more than Hoosier residents. In-state enrollment at Purdue declined by 700 students over the past decade, while international enrollments grew by 690. Non-Hoosiers—including these international students—now make up 43 percent of West Lafayette’s student body. At Bloomington, the international student population has increased by nearly 600 since 2004, the fastest growing of any student group on campus.<sup>15</sup> Surely the number of qualified Indiana residents has not declined so dramatically in just 10 years. Among the 20,000 low-income high school graduates in Indiana, these premier colleges could certainly each recruit a few hundred more talented students with the capacity to succeed in their rigorous curriculums.

A representative from Texas Tech also acknowledged that competition for students creates tensions in the enrollment management process. “Texas is the place that every other university in the country comes to recruit students because we’ve had such growth, but all that growth is a long way away

from us,” he said. Texas Tech, which is located in Lubbock, Texas, is more geographically isolated than other large public institutions in Texas—more than 320 miles from Dallas, 370 miles from Austin and San Antonio, and 530 miles from Houston. With significant competition for Texas’s growing number of high school graduates, the representative acknowledged that the remotely located Texas Tech may not be a top choice for under-represented students, who tend to be less mobile.

Penn State offered a different explanation for its main campus’ data, citing University Park’s role within the system. A university administrator noted that the Penn State system encompasses 20 campuses that serve students’ “financial circumstances and academic interests.” While he estimated that between 4,000 and 5,000 students annually move between campuses, with many transferring to the main campus, he also stated that the branch campuses enroll students who “are significantly more likely to be first-generation college, Pell eligible, location bound, nontraditional age, commuting from home, and/or receiving some form of student aid.”

He cited lower costs at the branch campuses as one reason low-income freshmen often do not begin at the State College campus. Indeed, University Park is the most expensive campus in the Penn State system, with low-income students facing approximately \$18,000 in annual costs *after* grant aid. However, the system, state, and institution *choose* this distribution of resources across campuses and students, pricing the main campus above the less selective branch campuses—reinforcing access gaps—and diverting low-income students to other options with fewer resources and lower graduation rates.

**Proving it is possible: Access-improving colleges have increased Pell enrollments above expected rates and maintain strong student outcomes**

As noted by the Potential Contributors, challenges to enrolling large numbers of low-income students do exist. Yet evidence from other colleges shows that those barriers are surmountable. To unearth policies that promote access for low-income students, we set out to find institutions that have substantially increased Pell enrollment rates in recent years while maintaining above-average graduation rates<sup>16</sup> and below-average loan default rates (see Table 2).<sup>17</sup>

While these Access Improvers are academically similar to the Potential Contributors, they outperform them by substantial

margins when it comes to low-income student access. Nearly two-fifths of their freshmen receive Pell Grants, exceeding the Potential Contributors' Pell enrollment rates by a whopping 20 percentage points. On average, Pell enrollment rates at these institutions exceed predicted rates by 10 percentage points. Over the past five years these schools have increased their Pell rates by more than two times the national average of 7.8 percentage points, without any appreciable declines in their graduation rates.

The average net price for low-income students at Access Improvers is slightly higher than at the Potential Contributors, because it is skewed by the high prices charged by the two private nonprofit institutions on the list, Stetson University and Indiana Wesleyan University. These private institutions have increased Pell enrollment in recent years, but their price may pose a barrier for low-income students, more so than some public institutions on the Access Improvers list.

The enrollment increases of the Access Improvers should yield sizable benefits in the near future. The University of California-Santa Cruz alone more than doubled its Pell enrollment rate, adding 4,030 more Pell-receiving students in 2013 compared with 2008. If the 10 Access Improvers graduate low-income students at their current overall six-year graduation

**Table 2: Access Improvers**  
Colleges That Increased Pell Enrollments While Maintaining Strong Student Outcomes

Institution Name	CONTEXT					PELL CONTRIBUTIONS			
	State	Percent Pell Enrollment Among All Institutions in State	Net Price for Low-Income Students	Median ACT Score	Six-Year Graduation Rate	Predicted Pell Enrollment Rate	Actual Pell Enrollment Rate	Pell Enrollment Rate Gap (Predicted-Actual, pct. pts.)	5-Year Percent Pell Increase (pct. pt.)
University of California–Santa Cruz	CA	52.3%	\$10,047	25	73%	33.0%	45.0%	-12.0	28
University of California–Irvine	CA	52.3%	\$8,248	25	86%	34.2%	43.7%	-9.5	22
University of California–Santa Barbara	CA	52.3%	\$9,049	27	80%	28.8%	38.0%	-9.2	16
University of California–Riverside	CA	52.3%	\$8,003	23	66%	37.3%	57.3%	-20.0	16
Indiana Wesleyan University	IN	42.8%	\$25,355	24	70%	29.6%	46.7%	-17.1	16
Stetson University	FL	57.6%	\$17,448	25	64%	24.1%	38.0%	-13.9	16
Grand Valley State University	MI	48.4%	\$10,663	24	66%	29.2%	34.7%	-5.4	14
The University of Tennessee–Knoxville	TN	56.8%	\$7,483	27	66%	22.3%	30.0%	-7.7	11
Florida State University	FL	57.6%	\$9,448	27	75%	25.2%	27.7%	-2.5	10
University of Florida	FL	57.6%	\$6,670	28	85%	23.6%	30.0%	-6.4	8
Average	—	52.9%	\$10,552	26	73%	28.7%	39.1%	-10.4	16

Source: U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS).  
Note: Median ACT Score, Actual Pell Enrollment Rate, Six-Year Graduation Rate, Net Price for Low-Income Students, and Percent Pell Enrollment Among All Institutions in State are averages of the 2011, 2012, and 2013 data to adjust for variation over time.



rates, we can expect to see more than 4,700 additional Pell students earn degrees in 2019—a notable step toward our national attainment goal.

### Lessons from Access Improvers

The challenges cited by Potential Contributors are real, but must be balanced with our nation’s pressing need to enroll more low-income students in college and serve them well. Representatives from the Access Improvers highlight how it can be done. They cite strong institutional leadership; an institution-wide commitment to access and success for low-income, first-generation, and underrepresented students; targeted and tireless outreach strategies; and state- or system-level policies as factors that have influenced their success.

In many cases, a visionary leader prioritized underserved groups and devoted resources to help them enroll in and graduate from these colleges. For example, an administrator at Florida State University discussed strong support for access and success efforts from the school’s leadership, noting that an ideal leader “put[s] everybody on the same page [and] pass[es] down that passion for ... student success.” The student-centered institutional ethos—often driven by strong leaders—was noted by most practitioners with whom we spoke. The University of California–Santa Barbara cited “a core commitment to reflecting the state of California,” and a representative from Grand Valley State University acknowledged what she called the “Grand Valley Magic” that breaks down campus silos to provide a small-college feel.

The institutional representatives in this study repeatedly discussed cross-campus collaborations, interdepartmental communication, and strong community partnerships as essential components to serving students well. While some of these practices were noted by representatives at the Potential Contributor institutions, their efforts were often newer, less entrenched, less deliberate, and infrequently driven by institutional leaders. Indeed, one representative remarked, “I don’t see a lot of ... visionary or strategic thinkers in higher education administration these days. I see a lot of kneejerk reactions.”

Underlying these campus-wide commitments, the Access Improvers cited targeted admissions and outreach efforts as the gateway to increasing access. Multiple University of California campuses emphasized the importance of holistic review policies, which allow the institutions to evaluate applicants based on a combination of factors, rather than allowing one criterion, like SAT or ACT scores, to dominate the admissions process. Institutions described “pipeline” development, in which institutional representatives tutor and coach students to develop college aspirations and become academically prepared in middle and high schools across the state. These efforts not only foster a widespread college-going culture, they make the applicant pool more diverse. Many of the Access

Improvers discussed deliberate efforts to identify high schools with large proportions of low-income and minority students, visit those schools multiple times a year to host admissions and financial aid workshops, and, in many cases, transport students to campus to introduce them to university life. When asked how colleges can find and attract high-achieving, low-income students, a Florida State University representative remarked with striking simplicity: “First of all, you have to look for them.”

This hands-on approach does not stop when students arrive on campus. Almost all of the institutions on our Access Improvers list offer summer bridge academic programs, use early warning systems to identify and intervene with struggling students, provide academic maps to help students take the right courses and hit key milestones on time, and run learning communities geared toward helping students succeed. The leaders we spoke with felt these programs made students feel supported, which generated positive word of mouth in lower-income communities, thus prompting more students to apply. “We are benefiting from the fact that we recruited students with the promise that we would provide them with the support that they would need to be successful, recognizing that we were bringing on a disproportionate number of students who were at-risk and we needed to have the infrastructure in place to support them,” said leadership at the University of California–Riverside. “Our success in graduating students has yielded very significant positive benefits in engendering trust with our communities. It has enabled us to maintain our diversity while our admissions profile and our selectivity is on the rise.”

States and systems also can influence institutional efforts to enroll low-income students and support them until completion. For example, the state of Florida’s outcomes-based funding system awards points to institutions based on Pell enrollment. Because of Florida State University’s achievement on this and other metrics, the university recently received additional state funding, some of which it allocated to additional grant aid for low-income students.

These promising state and system policies can enhance institutional efforts, but if state policies are not fully aligned with access efforts, the Access Improvers do not let them stand in the way. Grand Valley State University, for instance, receives the second-lowest state funding per in-state student among four-year colleges in Michigan.<sup>18</sup> However, rather than using low state appropriations as an excuse, the school uses it to guide deliberate decision making. “If it isn’t related to the students ... you don’t do it,” said a Grand Valley administrator.

Selective institutions are lauded as being “the best” in the nation, but often, they could be doing more to serve our nation’s most vulnerable students. Increasing access is possible, but the effort must be intentional. The Access



Improvers identified here have made a concentrated effort to increase diversity while also promoting academic rigor. They have implemented support systems that bolster the academic and social success of diverse student populations, and are building a pool of applicants who are both academically prepared and representative of diverse backgrounds.

If more universities made similar choices, far more low-income students would stand a fighting chance of earning the college credentials they need. Indeed, institutions can use these data to help identify their own gaps and areas for improvement. Changing practice is not easy, but by creating a college-going culture, by prioritizing the most at-risk students, and by implementing policies whose foundation is based in equity, institutions can change the makeup of our college-educated society. It's time for "the best" to be reframed to be based not on how much an institution has, but on how much it's willing to contribute.

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