



## WHITE PAPER SERIES From President Jonathan Brand

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"According to Professor Grawe, not only will we experience an increase and then a profound decrease in the overall number of students of college-age over the next 10 years, their composition will be significantly different along geographic and racial/ethnic lines."

### **Demographic Shifts and Cornell College**

Scholars and journalists have predicted significant changes in the demographic makeup of the United States. Many have projected, for example, an increase in the Hispanic population and, at the same time, a decrease in the number of white students. Some have concluded that the eastern half of the Midwest and New England will experience a drop in high school graduates over the next decade, which will be offset by more students in the South and West. Others have also predicted an increase in first-generation college students. Some have noted that the incoming student population will be less able to afford college. Obviously, for colleges and universities, predictions about demographic shifts are vital because any such trends will directly impact us.

Fortunately, with some certainty, birth rates give colleges and universities an 18-year head start in terms of predicting what our future student bodies *could* look like. With such information we can assess our current "markets" each year and determine whether we are well positioned to achieve our enrollment goals in specific regions in the subsequent 10-18 years. Birth rates and other demographic changes can also tell us whether we need to develop new markets in other areas concurrently.

So, what do we know about our future students? In a challenging and highly competitive higher education sector, information will always be our best ally. And, fortunately, there is current information available. Just last year in *Demographics and the Demand for Higher Education*, Professor Nathan Grawe, of Carleton College, examined demographic shifts beginning in 2007 and developed a higher education enrollment forecasting model that allows colleges and universities to consider future enrollment possibilities. More specifically, Professor Grawe selected "basic" demographic information, such as sex, race/ethnicity, geographic location, parental education, and family income to predict the probability that students would attend colleges of

Office of the President 600 First Street SW Mount Vernon, IA 52314-1098 319.895.4324 OFFICE 319.895.5237 FAX different types. In so doing, he then developed forecasts of the number of students in college through 2029 by type of college institution.<sup>1</sup>

This white paper focuses on demographic shifts along the lines of Professor Grawe's study and what these shifts could mean for Cornell College. After all, models such as those developed by Professor Grawe provide a great foundation for strategic planning. What kind of student can we hope to attract in the future along the predicted demographic lines? What are we doing *today* to be positioned to attract students in the future, especially as the number of available high school graduates declines?

#### What are the actual demographic trends?

At the highest level, beginning in 2007 and following the economic recession, the United States experienced a significant, greater than 12% drop in fertility rates.<sup>2</sup> This means that, after we experience a predicted 5% *increase* in high school graduates over the 2012 to 2025 period (that is, there are only 6 years remaining in this period), we will then experience a very sharp *decrease* of 9% in the following 5 years (2025 through 2029).<sup>3</sup>

According to Professor's Grawe's models, in the 2025-2029 period alone, the cohort number of 18-year-olds will shrink by more than 650,000 from 4.5 million to 3.85 million students, and college-going students will shrink by almost 450,000 from 2.87 million to 2.43 million. Professor Grawe, thus predicts a 15% decrease in the number of "traditional" students who will go to college—a drop that will occur in only 5 years (2025 through 2029).<sup>4</sup> We have a relatively positive demographic environment for the next 6 years and then a very challenging one in the following 5 years. As a result, at a high level, the competition for "traditional" college students (Cornell's proverbial bread-and-butter) will only get more acute.

An overall trend associated with individuals at a college-going age does not tell the entire story. There are also necessarily shifts within that population as a result of factors such as interstate migration, immigration, and birth rates along racial/ethnic lines—and they affect student recruitment at a tactical level. For example, the growth and decrease of high school graduates will not occur in the same regions of the United States. Between 2012-2025, the West and South will grow; between 2012-2032, New England and the eastern half of the Midwest will experience 15% to 20% drops.<sup>5</sup>

Immigration rates have remained steady in the U.S. for decades, and immigrants have come in greater numbers to California, Florida, New York-New Jersey, and Texas.<sup>6</sup> As a result, it is not unreasonable to believe that those areas will continue to see growth in the number of immigrants.

Specific birth rates along racial/ethnic lines also play a role. Non-Hispanic white public high school graduates the largest source of current "traditional" college students—will steadily decline. In the next decade growth in the number of high school graduates must be coming from those who identify as other than non-Hispanic white public students. In fact, notwithstanding the decrease in the number of high school graduates beginning in 2025, the predicted number of students who identify as other than non-Hispanic white will increase by more than 15% between now and 2032.<sup>7</sup>

<sup>&</sup>lt;sup>1</sup> No doubt, any forecast can be flawed (particularly if it is based on historic patterns). Past is not always prologue. For example, colleges and universities predicted very poor enrollment results in the 1980s and 1990s based on lower fertility rates in the 1970s. This drop never occurred because, during the 1980s and 1990s, more women and adult learners entered into colleges at rates that exceeded historic rates (on which the earlier forecasts had been built). The models at that time, using past trends, did not correctly consider shifts such as the increase in women students. As a result, any forecast, though based on facts, can tell an incomplete story.

<sup>&</sup>lt;sup>2</sup> Nathan Grawe D., Demographics and the Demand for Higher Education, 2018, 1 and 6.

<sup>&</sup>lt;sup>3</sup> Ibid., 15.

<sup>&</sup>lt;sup>4</sup> Ibid., 45.

<sup>&</sup>lt;sup>5</sup> Ibid., 12 and 15.

<sup>6</sup> Ibid., 8.

<sup>&</sup>lt;sup>7</sup> Ibid., 17.

In sum, according to Professor Grawe, not only will we experience an increase and then a profound decrease in the overall number of students of college-age over the next 10 years, their composition will be significantly different along geographic and racial/ethnic lines.

#### Who will attend college in light of these demographic changes?

The demand for college does not always track changes in the population.<sup>8</sup> Not every student eligible for college or at a college-going age attends college. Through his model, the Higher Education Demand Index (HEDI), Professor Grawe predicts college-going rates based on family income, race/ethnicity, and parental education in light of the headcount data above. For example, it may come as no surprise that children from higher income families (incomes above \$100,000) are 50% more likely to attend college; are twice as likely to attend a four-year college or university; and are six times more likely to attend an institution ranked among the top 50 colleges or universities than those earning under \$50,000 per year.<sup>9</sup>

According to Professor Grawe, the racial/ethnic makeup of college students (not those of college-age BUT those actually in college) will also change dramatically over the 2012-2029 period. The population of non-Hispanic whites attending *any* college is predicted to decrease by 19% between 2012 and 2029; the population of non-Hispanic blacks is predicted to decrease by 2.7%; the population of Hispanics is predicted to increase by 10%; and the population of Asian-Americans is predicted to increase by 7.7%. In 2012 non-Hispanic whites represented 60% of all college students; they will represent less than 55% in 2029.<sup>10</sup>

Finally, students' educational choices strongly correlate with parental education. According to Professor Grawe, a student with one parent with a college degree is almost twice as likely to gain some postsecondary education as a student with no parents who have completed high school.<sup>11</sup> Counter to the general media predictions that we will continue to see growth in the number of first-generation college students, Professor Grawe expects strong growth nationwide over the next 10 years in the number of potential college students with parents who have some college education. Today, first-generation students comprise 60% of students in college; Professor Grawe estimates that they will comprise only 53% in 2029.<sup>12</sup>

Tuition and financial aid has also influenced, and will continue to influence, enrollment trends. According to the National Association of College and Business Officers (NACUBO), since 2007, the average growth in net tuition revenue per full-time student on an annual basis has only kept pace with inflation. At a national level the overall discount rate (that is, the percentage of a college's sticker price that is reduced by financial aid awarded to students) has risen from 35% in 2007 to 43% in 2015. These higher discount rates have largely offset tuition increases, which have made the finances of colleges and universities that much more challenging.

Interestingly, major media sources and higher education trade publications have predicted a decrease in the number of full-pay students as discount rates continue to rise. Professor Grawe predicts the opposite—that the number of students capable of being full-pay students will have grown by 30% between 2012 and 2025 and then will drop by 15% through 2029, resulting in an overall net increase of 10% in the 2012-2029 period.<sup>13</sup>

<sup>&</sup>lt;sup>8</sup> Ibid., 21.

<sup>&</sup>lt;sup>9</sup> Ibid., 24.

<sup>&</sup>lt;sup>10</sup> Ibid., 56.

<sup>&</sup>lt;sup>11</sup> Ibid., 51.

<sup>&</sup>lt;sup>12</sup> Ibid., 55.

<sup>&</sup>lt;sup>13</sup> Ibid., 93.

# Takeaways regarding the demographics of the next decade of college students based on historic trends and related forecasts

- We experienced a greater than 12% drop in birth rates following the 2008 financial crisis, which could mean that colleges and universities, in the aggregate, will see a 15% drop in the "traditional" college-age population between 2025 and 2029.
- Four-year colleges and universities, in the aggregate, will also experience a 15% drop in the "traditional" college-age population between 2025 and 2029.
- The number of high school graduates is predicted to drop in New England and the eastern half of the Midwest by 15% to 20% between 2012-2032.
- There will continue to be a population shift toward the South and West.
- The population of non-Hispanic whites attending *any* college is predicted to decrease by 19% between 2012 and 2029; the population of non-Hispanic blacks is predicted to decrease by 2.7%; the population of Hispanics is predicted to increase by 10%; and the population of Asian-Americans is predicted to increase by 7.7%.
- Increases in college matriculation over the most recent past decades means that we will have larger numbers of college students with parents who attended college. That is, the number and percentage of students who are first-generation will drop.
- There will be an increase in the number of full-pay students over the next decade.

#### Four-Year Schools: The Elites, the Nationals, and the Regionals

According to Professor Grawe, higher education will experience not only a significant shake-up in the next 10 years (and beyond) in light of the predicted drop in college-going students, but it will also experience even greater stratification among colleges and universities. A subset of schools will be clear winners while another subset of schools will be clear losers.

To reach these conclusions, Professor Grawe applied his demographic model to different types of colleges and universities: two-year institutions and four-year ones. He then further subdivided four-year institutions into 3 categories: Elite, National, and Regional colleges and universities. Professor Grawe defines "Elite" schools as those currently in the top 50 of the U.S. News & World Report Ranking. (The median distance traveled to college by students in this category is 175 miles.) "National" schools are those currently in the top 51-100 of the U.S. News & World Report Ranking. (The median student in this category traveled 110 miles to college.) Finally, "Regional" schools are those outside of the top 100 schools. (More than half of their students traveled 60 miles or less to college.)<sup>14</sup>

At the highest level, according to Professor Grawe, Elite schools stand to benefit and prosper during these profound demographic shifts of the next 10 years. With strong execution, National schools have a real opportunity to succeed. Regional schools are at great risk.

#### **Elite Schools**

According to Professor Grawe's model, while Elite schools will see drops in students coming from the Northeast and the Midwest, there are significant countervailing positives for these schools. First, there will be more students with parents who have some college education. And, second, even though the percentage of non-Hispanic white students is predicted to fall by 14% at Elite institutions through 2029, that result will be offset by an 8% increase in the Asian American population and a 3% increase in the Hispanic population.<sup>15</sup> Perhaps most importantly as it relates to enrollment trends, students with college-educated parents and Asian-Americans are significantly more likely to attend college.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Ibid., 70.

<sup>&</sup>lt;sup>15</sup> Ibid., 83.

<sup>&</sup>lt;sup>16</sup> Ibid., 85.

In light of these demographic trends, Professor Grawe's model predicts a 14% increase (over 21,000 more students) in the national demand for Elite institutions between 2012 and 2029, which means that the other, less selective schools will see reduced enrollment from that pool.<sup>17</sup>

#### **National Schools**

Professor Grawe estimates that National colleges and universities will lose approximately 27,000 students by 2029 (from about 278,000 students in 2012 to 251,000 in 2029).<sup>18</sup> However, the outlook is still somewhat optimistic. At one level, even though the National schools will also experience declines in the Northeast and the Midwest, there are still real enrollment opportunities in the entire West and the Southeast.<sup>19</sup>

At another level, Professor Grawe also believes that Elite schools will not be able to meet the rising demand for them, which means that there may be a beneficial "trickle-down" effect for National institutions. Elite schools are projected to experience 14% growth in their demand between 2012 and 2029. If Elite schools grow, instead, by no more than 5% in that period and non-admitted students choose a National school instead, such an increase in overall demand in National schools would offset more than half of the projected 27,000 reduction at the National-school level during that same period.<sup>20</sup> For a National institution to experience such a benefit, it will have to be prepared to alter its recruitment strategies and educational program on a regular basis to meet the needs of those students who are unable to matriculate at Elite schools. National schools will, thus, have to reject a "status quo" strategy in favor of a more agile posture.

It is also possible that National schools will change their recruitment and admission practices in order to attract students who have historically attended Regional schools, especially in geographic areas where there will be declines in college-going students. This can provide another opportunity for National schools.

For both Elite and National institutions, Professor Grawe also believes that there will be a strong increase in fullpay students, growing by approximately 14% between 2012 and 2029.<sup>21</sup>

#### **Regional Institutions**

Suffice it to say, the outlook for Regional colleges and universities is a challenging one. The decline in college-going students will hit Regional schools the hardest where Professor Grawe predicts, for example, a 25% drop in students from New England and the eastern half of the Midwest and a 20% decrease from the Middle Atlantic. Professor Grawe's model even shows challenges for Regional schools in areas where there is growth in college-going students.<sup>22</sup>

#### So what does this all mean for Cornell?

Under Professor Grawe's taxonomy, we at Cornell have oscillated between being a Regional school and a National one over the last 15+ years. (Ten of the last 15 years, we have been ranked higher than 100.) We have been trending up in the last decade in the rankings, and, right now, we are firmly a National school under Professor Grawe's definition, ranked 81st in U.S. News & World Report. Thus, Professor Grawe's forecasts associated with National schools should apply to us, and we should consider the demographics and possible responses to them as a National school would.

At the same time, without relying overly on this observation, we are also fortunate in that we have strong attributes generally associated with Elite schools. After all, according to U.S. News & World Report, the quality of teaching

<sup>&</sup>lt;sup>17</sup> Scott Jaschik, "Are Prospective Students About to Disappear?," *Inside Higher Ed*, January 8, 2018, https://www.insidehighered.com/ admissions/article/2018/01/08/new-book-argues-most-colleges-are-about-face-significant-decline.

<sup>&</sup>lt;sup>18</sup> Nathan Grawe D., *Demographics and the Demand for Higher Education*, 2018, 73.

<sup>&</sup>lt;sup>19</sup> Ibid., 75-76.

<sup>&</sup>lt;sup>20</sup> Ibid., 72-73.

<sup>&</sup>lt;sup>21</sup> Ibid., 93-94.

<sup>&</sup>lt;sup>22</sup> Ibid., 73.

at Cornell places us in 52nd place—just outside of the top 50. We attract a decidedly national and international student body, where students come from 47 states and 19 foreign countries. The median distance our students travel to get to campus is 226 miles, which is in line with Elite schools. We are members of the Associated Colleges of the Midwest—which includes the most well-respected and elite national liberal arts colleges in the Midwest. We are one of only 286 colleges and universities in the United States with a Phi Beta Kappa Chapter. We remain justifiably recognized as one of the Colleges That Change Lives. And, having attributes associated with Elite schools should provide a distinct advantage for us going forward.

But we lag behind Elite schools in other ways. For example, our financial strength is not comparable. Our endowment is \$74.5 million when the average endowment<sup>23</sup> by general groupings of 25 schools in the top 100 of the U.S. News & World Report Ranking is as follows:

U.S. News & World Report Ranking <sup>24</sup>	Median <sup>25</sup>	Mean
1 to 26	\$1.35B	\$1.19B
27 to 50	\$667M	\$498M
51 to 75	\$537M	\$340M
76 to 102	\$158M	\$209M
#81 Cornell College	\$74.5M	

At just over 1,000 students, we are also significantly smaller than Elite schools (and even National ones). In fact, the top 50 schools have an average student body of 2,151 while those schools ranked 51 to 100 have an average student body of 1,642.

In positive terms, the rankings reveal that we are punching far above our weight class.

#### What can we do to respond to these demographic trends?

"Those that beat these odds are likely to be characterized by exceptional agility. They will experiment with recruitment in new territories, cherry-pick students who trickle down due to excess demand for other institution types, nimbly pivot away from fierce competitors toward better peer matchups, and generally accept the necessity for repeated adaptation."<sup>26</sup>

If Professor Grawe's models are for the most part accurate, we have several concurrent high-level strategies that we must continue to pursue. At one level, we must keep doing everything that we can to develop those attributes most closely associated with Elite schools. The strength of our resources (such as our endowment) and the size of our student body immediately come to mind.

Fortunately, we have made important progress over the last decade—from the major revisions to our core curriculum to the expansion of experiential learning opportunities (such as off-campus study and internships) and career/life preparation for all of our students, to the enhancements in student success and wellness/mental health, and to our vital facilities improvements such as in the Thomas Commons, the Russell Science Center, and the renovations to our residence halls. All of this progress has been thanks to the impressive support of our alumni and friends—something that is critical and a hallmark of the best schools in the country.

<sup>&</sup>lt;sup>23</sup> All endowment values are from Fiscal Year 2017.

<sup>&</sup>lt;sup>24</sup> The rankings could not be divided by neat increments of 25 because of ties between schools.

<sup>&</sup>lt;sup>25</sup> In some instances, because of ties, the median was calculated as the average of schools ranked at the middle of each grouping.

<sup>&</sup>lt;sup>26</sup> Nathan Grawe D., *Demographics and the Demand for Higher Education*, 2018, 112.

Let me be clear. Schools are not inherently better because they are Elite. Nor does having the status of an Elite institution *guarantee* success—such as high student learning and satisfaction; financial strength; and the achievement of enrollment, retention, and graduation goals. Rather, Elite schools are better positioned to weather market vicissitudes, including demographic shifts. Reputation is an asset. A bigger endowment is an asset. A larger student body is an asset. And, these are all central traits of Elite schools.

As a result, seeking those attributes of an Elite school is essential. To that end we must continue to improve the student experience, as well as the operations of Cornell with the same gusto and urgency over the next 10 years as over the last 20. This will necessarily require continued impressive giving from our alumni and friends as well as shrewd endowment management. And, we need to continue to share widely and regularly our students', alumni, faculty, and staff accomplishments; our primary points of distinctions (such as our One Course calendar, undergraduate research opportunities, and inspiring warmth as an academic community); and our strategic progress.

At another level, even if Professor Grawe is correct that we are a National school, we need to continue to exhibit the agility and nimbleness that will allow us to seize all opportunities that will come to schools in that category (for example, as a result of any trickle-down from other institutions). This means that we will need to move into new admission/recruitment markets, not only in the U.S. but also across the globe. Fortunately, international student recruitment has been a wonderful success for us over the last few years.

More specifically, here are the solutions that we need to continue to pursue, in part, based on the impending demographic changes:

- Recruit even more effectively as competition for students becomes more fierce.
- Expand our pool of students not just in our current markets and within our current pools of students but also at the "intersection of markets we already draw from" and "markets that are expected to grow." This also means that we need to continue to grow our international student population, as we are doing.
- Culturally, remain receptive to a new normal and accept that recruiting harder or marketing more will, alone, not be the silver-bullet answers.
- Regularly revise our curricular and co-curricular offerings—not only in light of student needs and demands but also in light of the needs of the communities and organizations into which our graduates go, making the most of our distinctive One Course calendar.<sup>27</sup>
- Continue to explore new types of pedagogy and modes of teaching that are flexible and personalized for each student, especially as the demographics, ethnic and economic diversity, and learning styles of our students change.
- Invest in retention efforts by focusing on student success, student health, and wellness.
- Continue to expand the diversity and skills of our faculty and staff to meet the expectations of an increasingly diverse student body.
- Keep contributing to the positive view of higher education and the value that a college education provides—particularly the value of our distinctive One Course calendar.
- Contribute to national conversations and policies that alter the demand curve and encourage *more* students to go to college than have historically gone in the past; for example, from among low-income students or within racial categories that have larger admission gaps.
- Ensure a physical campus that is functional, beautiful, and well-maintained.

<sup>&</sup>lt;sup>27</sup> This white paper has not even touched on the major generational shift that we are experiencing right now. Our students are now of Generation Z, and their predilections, interests, and needs are different from those of Millennial and Generation Y students. In fact, our very own Trustee and graduate, Dr. Adrienne Corn '93, founder of HumanTalented, has studied generational shifts and how those shifts have influenced and will influence higher education and the workforce. We must keep these shifts at the front of our minds too. Please see Dr. Adrienne Corn, *The Millennial Mandate and the Future of Work*, January 27, 2017, https://www.outsellinc.com/product/the-millennialmandate-and-the-future-of-work/

- Focus on those initiatives that will, in turn, strengthen the financial profile of Cornell, such as through endowment growth and increased philanthropy.
- Energize our alumni to support Cornell-not only through giving but also through their time and expertise.

This is not merely an academic exercise. Sadly, many schools that do not experience the enrollment and financial growth that they need will be left with no choice other than to manage the reductions, contract, and risk long-term failure.

For us at Cornell, relative to other schools, we have a lot going for us. We are fortunate to have significant points of distinction. We are fortunate to have our particular community of students, faculty, and staff, as well as our campus culture. We are fortunate to be well recognized, nationally and internationally. And, we are fortunate to have enjoyed very important growth in our academic and co-curricular program over the last few decades. At the same time, we must be cognizant that we lack the financial foundation emblematic of the schools that we consider our peers. That fact should not demotivate us, but focus and push us.

Now, particularly in light of the imminent changes in the demographics of college-going students nationwide, we must keep going with energy, confidence, and a sense of urgency to solidify those attributes associated with Elite schools—making strong strategic decisions, executing well on our plans, and remaining open to new opportunities as they arise.

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Jonathan Brand President

This presidential white paper is part of a series on matters of importance to Cornellians. I welcome any comments or observations you might have on this white paper topic. You can always reach me at 319.895.4324 or jbrand@cornellcollege.edu