Advancing Social Mobility and Academic Excellence

Braden J. Hosch, PhD.
Asst. Vice President for Institutional Research, Planning & Effectiveness
Overview

Institutional Profile
• Profile | Graduation rate improvement

Mobility Report Cards (Chetty, et al.)
• Method | Rankings | Geography | Parents’ income

Why is Stony Brook so successful?
• Value proposition | Programs | Geography

Takeaways
Stony Brook University
Institutional Profile
Freshman graduation rates increased fifteen percentage points in the last five years.

**Six-year grad rate:**
- 2002: 62%
- 2009: 74%
- 2014: 63%

**Four-year grad rate:**
- 2002: 40%
- 2009: 47%
- 2014: 63%

**15%**
Percentage point increase in 4-yr grad rate over 5 years

**Top 3%**
of colleges or universities for improvement over a 5-year period
Economic benefit to students

1,300 additional students graduated on time

$88 million economic benefit to students

$16 million saved in tuition & fees
$72 million in additional earning capacity
Equity gaps in graduation rates are largely closed

4-year grad rate (2014 cohort)

- Women: 68%
- Men: 57%
- Black: 58%
- Hispanic: 62%
- White: 61%
- No Pell: 62%
- Pell: 64%

6-year grad rate (2012 cohort)

- Women: 78%
- Men: 70%
- Black: 73%
- Hispanic: 71%
- White: 72%
- No Pell: 72%
- Pell: 76%
Mobility Report Cards:
The Role of Colleges in Intergenerational Mobility

Raj Chetty, Stanford University
John N. Friedman, Brown University
Emmanuel Saez, UC-Berkeley
Nicholas Turner, US Treasury
Danny Yagan, UC-Berkeley

January 2017, Stanford Center on Poverty & Equality
Mobility Report Card Research Approach

Research question

• What role do colleges play in intergenerational income mobility?

Primary Sample

• 11 million children born 1980-82 claimed as dependents by tax filers in the U.S.

Data source

• De-identified data from 1996-2014 income tax returns
• Attendance data reported by institutions to IRS on Form 1098-T

Focus on change in percentile ranks

• What proportion of students from bottom fifth of parental income distribution reach the top fifth of graduate income distribution?
Mobility Report Major Findings

Differences by Sector

- Elite institutions provided low-income students with most access to top 1%
- Comprehensives and community colleges provided most access to top 20%
- [Stony Brook is an exception]

“Overplacement” Not a Concern

- Low-income students exhibited similar outcomes to peers at selective institutions
- When they got in
- When they graduated

Solutions to mobility may reside in comprehensive sector

- Because Cal State and CUNY exhibit high mobility rates look there for answers
- [I will complicate this in a moment]

Access declining at high mobility institutions

- Calls for some reconsideration of aid policies, state support
- New America follow-up

[Stony Brook is an exception]
Stony Brook’s calculated mobility rate

Access

16.5% of students came from the lowest quintile of family income (under $25,000)

Success

54.5% of these students reached the top quintile of graduate income in their 30s (over $58,000)

Mobility Rate

8.4%

Stony Brook ranked #3 among all institutions and #1 among highly selective institutions

Median income of all Stony Brook graduates in their 30s: $64,700

Source: Chetty, et al. online data table 3, amounts are 2015 dollars, adjusted by CPI-U. Graduate income is a non-zero median.
**Stony Brook ranked #3 on social mobility rate; #1 among highly selective universities**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Name</th>
<th>Mobility Rate</th>
<th>Access X</th>
<th>Success Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cal State, LA</td>
<td>9.9%</td>
<td>33.1%</td>
<td>29.9%</td>
</tr>
<tr>
<td>2</td>
<td>Pace Univ.</td>
<td>8.4%</td>
<td>15.2%</td>
<td>55.6%</td>
</tr>
<tr>
<td>3</td>
<td><strong>Stony Brook U.</strong></td>
<td><strong>8.4%</strong></td>
<td><strong>16.5%</strong></td>
<td><strong>51.2%</strong></td>
</tr>
<tr>
<td>4</td>
<td>Technical Career Insts.</td>
<td>8.0%</td>
<td>40.3%</td>
<td>19.8%</td>
</tr>
<tr>
<td>5</td>
<td>U of Texas – Pan American</td>
<td>7.6%</td>
<td>38.7%</td>
<td>19.8%</td>
</tr>
<tr>
<td>6</td>
<td><strong>CUNY System</strong></td>
<td><strong>7.2%</strong></td>
<td><strong>28.7%</strong></td>
<td><strong>25.2%</strong></td>
</tr>
<tr>
<td>7</td>
<td>Glendale Comm. Coll.</td>
<td>7.1%</td>
<td>32.4%</td>
<td>21.9%</td>
</tr>
<tr>
<td>8</td>
<td>South Texas College</td>
<td>6.9%</td>
<td>52.4%</td>
<td>13.2%</td>
</tr>
<tr>
<td>9</td>
<td>Cal State, Poly.-Pomona</td>
<td>6.8%</td>
<td>14.9%</td>
<td>45.8%</td>
</tr>
<tr>
<td>10</td>
<td>U of Texas – El Paso</td>
<td>6.8%</td>
<td>28.0%</td>
<td>24.4%</td>
</tr>
</tbody>
</table>

**Access:** share of children at a college with parents in the bottom quintile of the income distribution  
**Success Rate:** share of children with parents in the bottom quintile of the income distribution that reach the top quintile of the income distribution

Source: Published Table III (Table IV in later versions)

Many institutions rolled up into systems
Association between geographic location and mobility rate

Consolidation of public systems masks some of the data

Change in access at Stony Brook requires context

$75,100
Median parental income

17%
Parents in bottom income quintile

38%
40%
Pell Pct US students
40%

37%
37%
Pell Pct all UG students
35%

11%

Birth cohort
1980
1991
1998

College mid-point
2000-01
2011-12
2018-19

Source: Chetty, et al. (2017) Web data table 3; Stony Brook Institutional Research; submissions to IPEDS
Stony Brook remained among the most accessible highly selective institutions

<table>
<thead>
<tr>
<th>Name</th>
<th>1980</th>
<th>1991</th>
<th>rank (out of 157)</th>
<th>rank (out of 157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Of California, San Diego</td>
<td>112,300</td>
<td>82,000</td>
<td>43</td>
<td>1</td>
</tr>
<tr>
<td>Stony Brook</td>
<td>75,100</td>
<td>88,300</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>University Of Texas At Dallas</td>
<td>96,700</td>
<td>89,800</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Kettering University</td>
<td>107,400</td>
<td>92,700</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Milwaukee School Of Engineering</td>
<td>88,100</td>
<td>93,600</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>University Of Wisconsin System</td>
<td>95,100</td>
<td>95,700</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Loyola University New Orleans</td>
<td>113,100</td>
<td>96,300</td>
<td>46</td>
<td>7</td>
</tr>
<tr>
<td>University Of California, Irvine</td>
<td>86,200</td>
<td>98,500</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Illinois Institute Of Technology</td>
<td>84,900</td>
<td>99,100</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Gustavus Adolphus College</td>
<td>112,600</td>
<td>101,800</td>
<td>44</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Chetty, et al. online data table 3, amounts are 2015 dollars, adjusted by CPI-U; selectivity tiers include highly selective, Ivy +, and other elite institutions, excludes institutions with data missing in either year.
Parent median income by student birth cohort, Public AAU

Why is Stony Brook so successful with social mobility?

Value Proposition

Programs

Geography
Stony Brook’s Value Proposition

2018-19 Undergraduate Tuition & Fees – Public Research Universities in Northeast

<table>
<thead>
<tr>
<th>Nonresident</th>
<th>Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>Pittsburgh</td>
</tr>
<tr>
<td>42,516</td>
<td>19,080</td>
</tr>
<tr>
<td>38,098</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>34,858</td>
<td>18,499</td>
</tr>
<tr>
<td>Penn State</td>
<td>Penn State</td>
</tr>
<tr>
<td>34,570</td>
<td>18,454</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Vermont</td>
</tr>
<tr>
<td>33,879</td>
<td>18,276</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>32,052</td>
<td>15,887</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>Connecticut</td>
</tr>
<tr>
<td>31,282</td>
<td>15,730</td>
</tr>
<tr>
<td>Rutgers</td>
<td>Rutgers</td>
</tr>
<tr>
<td>30,862</td>
<td>14,974</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>27,769</td>
<td>14,138</td>
</tr>
<tr>
<td>Buffalo</td>
<td>Buffalo</td>
</tr>
<tr>
<td>27,295</td>
<td>10,099</td>
</tr>
<tr>
<td>Stony Brook</td>
<td>Stony Brook</td>
</tr>
</tbody>
</table>

Source: Institutional web sites; consistent with IPEDS Data Center
Value Proposition – US News Rank vs. Tuition & Fees

Source: US News and World Report, IPEDS Data Center
US News Rank vs. Mobility Rate

# Stony Brook’s Programs

## STEM & Health Focus
- Two-thirds of graduates complete a STEM or Health Degree
- STEM & Health grad rates exceed avg. grad rates

## Educational Opportunity Program
- Cohort program for low income, preparation gaps
- Summer program w/ no cell phone
- Small advising groups
- Intensive mentoring academic support
- Detailed schedule planning

## Other Support Programs
- Collegiate Science and Technology Entry Program (CSTEP)
- Louis Stokes Alliance for Minority Participation (SUNY LSAMP)
- S-STEM ASSETS
- Campus housing first generation program

## Financial Aid
- Personalized financial aid check-ups
- 40% receiving NY Tuition Assistance Program grants
- Microgrants to seniors with unexpected financial need

## Student Success Initiatives
- Long standing cross-functional academic success team
- Analytics and predicted support need
- Reduction in classes w/ high DFW rates
- Class availability
- Policy reform
## Stony Brook’s Location

<table>
<thead>
<tr>
<th>Access to dense HS populations with quality schools</th>
<th>Access to hot labor market</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 public high schools in <em>US News</em> Top 100 located in NYC / Long Island</td>
<td>Median earnings bachelor’s recipients, age 25+</td>
</tr>
<tr>
<td>13% of Stony Brook’s entering freshmen come from these 16 schools</td>
<td>NYC/Long Island $63-75k median</td>
</tr>
<tr>
<td>57% of these students received Pell grants</td>
<td>U.S. = $52,519</td>
</tr>
</tbody>
</table>

Source: Stony Brook Institutional Research; US Census ACS 2017, 5-year estimates
Stony Brook attracts Pell recipients with academic backgrounds comparable to non-Pell recipients

**Distribution of Entering First-Time Freshmen by HS GPA**

- **Public 4-Year**
  - Pell: 18%
  - No Pell: 10%

- **Private, Not-for-profit 4-Year**
  - Pell: 14%
  - No Pell: 6%

- **Stony Brook**
  - Pell: 9%
  - No Pell: 7%

**Data sources:** NCES Beginning Postsecondary Student Survey 2012/14, Stony Brook IR Office (fall 2014 cohort)
Stony Brook attracts Pell recipients with academic backgrounds comparable to non-Pell recipients

Six-year bachelor’s completion rates of first-time undergraduates by HS GPA

<table>
<thead>
<tr>
<th>Public 4-Year</th>
<th>Private, Not-for-profit 4-Year</th>
<th>Stony Brook</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS GPA</td>
<td>Pell</td>
<td>No Pell</td>
</tr>
<tr>
<td>Below B-</td>
<td>24%</td>
<td>27%</td>
</tr>
<tr>
<td>B- to B</td>
<td>27%</td>
<td>38%</td>
</tr>
<tr>
<td>B to A-</td>
<td>38%</td>
<td>41%</td>
</tr>
<tr>
<td>A- to A</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Data sources: NCES Beginning Postsecondary Student Survey 2004/09, Stony Brook IR Office (fall 2014 cohort)
## Takeaways

High quality academic and support programs are a foundational requirement for student success

<table>
<thead>
<tr>
<th>Recruit low income students with sufficient if not equitable preparation</th>
<th>Improve access to high paying labor markets</th>
<th>Be prepared to address new data about higher ed effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- high grades</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- quality high schools</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>