# **Pace University** DigitalCommons@Pace

Wilson Center for Social Entrepreneurship

Academic, Policy and Research Centers

3-16-2012

# Economic Impact of Pace University New York City

Rebecca Tekula PhD Pace University - New York, rtekula@pace.edu

Anna-Kay Sinclair MPA Pace University - New York, asinclair@pace.edu

Follow this and additional works at: http://digitalcommons.pace.edu/wilson



Part of the Economics Commons, and the Education Policy Commons

#### Recommended Citation

Tekula, Rebecca PhD and Sinclair, Anna-Kay MPA, "Economic Impact of Pace University New York City" (2012). Wilson Center for Social Entrepreneurship. Paper 8.

http://digitalcommons.pace.edu/wilson/8

This Article is brought to you for free and open access by the Academic, Policy and Research Centers at DigitalCommons@Pace. It has been accepted for inclusion in Wilson Center for Social Entrepreneurship by an authorized administrator of Digital Commons@Pace. For more information, please contact rracelis@pace.edu.



# Economic Impact of Pace University New York City

Economic Analysis

Prepared for
Pace University

March 16, 2012
The Wilson Center for Social Entrepreneurship
Pace University
Rebecca Tekula, PhD, Executive Director
Anna-Kay Sinclair, MPA, Senior Research Associate

### **NARRATIVE**

For over a century, Pace University has been an educational and economic asset to Lower Manhattan and the greater New York City area. Our NYC campus enrolls over 7,500 students, employs over 2,500 people, and coordinates placements of over 1,000 students in internships and clinical practice each year. In addition to our faculty, staff, and student community, Pace NYC special events bring over 51,000 visitors to the area each year. As Lower Manhattan's only research university, Pace is an important academic presence with an economic impact reaching throughout the region.

### **Economic Impact**

Pace University spending on payroll, construction, procurement and other expenses has a significant impact, generating hundreds of millions of dollars of economic activity for the City and the region. Likewise, our students and visitors to our NYC campus spend on meals, entertainment, transportation and retail purchases, all of which has a tremendous impact on the local economy.

In total, Pace University NYC's impact on the regional economy amounts to \$480 million in increased output, \$149.4 million in earnings, and 4,098 jobs<sup>1</sup>. This can be broken down into three major areas of impact: University Spending, Student Spending and Visitor Spending.

• University Spending: In the 2010-2011 fiscal year, our NYC campus expenditures topped \$164.5 million, contributing \$64.3 million in wages and salaries, \$3 million in sponsored research, \$67.5 million in scholarships, and \$8.5 million in construction and procurement. The multiplier effect, or secondary impact, of Pace NYC expenditures, as determined by the Regional Input-Output Modeling System (RIMS II) developed by the Bureau of Economic Analysis of the U.S. Department of Commerce, generates an estimated \$353 million in increased economic output, \$121.7 million in earnings and 3,158 additional jobs.

Additionally, Pace makes significant contribution to state and local government taxes. In fiscal year 2011, the University withheld more than \$7.3 million in NYC and NYS taxes from the employment income of all NYC and Westchester employees. In addition, we contributed \$417,467 in Metropolitan Commuter Transportation Mobility (MCTM) tax,

<sup>&</sup>lt;sup>1</sup> According to the BEA: **Output** represents the total dollar change in output that occurs in all the industries for each additional dollar of output delivered to final demand by the Industry corresponding to the entry; **Earnings** represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the Industry corresponding to the entry; **Employment** represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry.

and \$711,054 in NYC property taxes.

- **Student Spending:** Off-campus student spending also generates economic activity in the region. In fiscal year 2011, our NYC students spent \$68.4 million for off-campus housing, food, entertainment, housing, transportation, books, and other personal expenses. This spending supports employment, economic output and earnings in industries such as retail trade, real estate, food services, among others thereby generating \$115.4 million increase in economic output, \$24 million in earnings and 820 jobs.
- **Visitor Spending:** In fiscal year 2011, over 51,000 people visited the NYC campus for theater and other performances, as well as academic conferences and speaking engagements. Visitors spent over \$6 million at restaurants, hotels, retail stores, and other community businesses. The secondary impact of visitor spending generates an estimated \$11.5 million in economic output, \$3.7 million in earnings and 119 full-time equivalent jobs.

#### **Putting it all Together**

Pace University's NYC has been an important neighbor to the Lower Manhattan community for over a decade – and indeed Pace is a strong economic vehicle generating nearly half a billion dollars in economic impact in the area.

# **METHODOLOGY**

In order to define the economic impact of Pace University, New York City, we looked at several measures and estimates including the overall operating budget for the campus, the number and profile of students, and visitor spending. We calculated the multiplier effect, or secondary impact, of Pace NYC expenditures as determined by the Regional Input-Output Modeling System (RIMS II) developed by the Bureau of Economic Analysis of the U.S. Department of Commerce.

### **Economic Impact of University Spending**

Economic multipliers were obtained from the BEA and applied to the overall University expenditures. In order to estimate how Pace NYC expenditure contributed economic activity in the region, we applied output, earnings, and employment multipliers associated with the industry *Junior colleges, colleges, universities and professions schools-611A00*. According to the BEA:

- (1) **Output** represents the total dollar change in output that occurs in all the industries for each additional dollar of output delivered to final demand by the Industry corresponding to the entry
- (2) **Earnings** represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the Industry corresponding to the entry
- (3) **Employment** represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry

These multipliers were applied to the NYC Campus expenditure of \$164.5 million to determine the indirect and induced impact University spending contributed to the major industries.

#### **Economic Impact of Student Spending**

While tuition and fees, and room and board for on-campus students, is already included in the overall University budget, we further estimated student spending off-campus. Estimates of student spending on books, living allowance, food, travel, and personal expenses are available in the University's Cost of Attendance (COA) budget. With this information, and numbers of inresidence students and non-resident students, both independent and dependent, we able to allocate students to several spending profiles.

Multipliers for *Retail Trade: Industry Code 28* were applied to all student spending on personal expenses, books, and food, estimated at \$24.6 million. Multipliers for *Real estate: Industry Code 46* were applied to the housing budgets for students classified as "living independently."

These off-campus housing expenditures were estimated at \$43.8 million. Summer student spending was estimated at 25% of the annual COA, in line with comparable reports. We further assume that 70% of our part-time students are already living and working in NYC, therefore we estimated their spending at 30% of COA.

### **Economic Impact of Visitor Spending**

In accordance with comparable reports, to determine the economic impact of visitor spending we obtained actual and estimated numbers of visitors from the University Departments of Special Events and Cultural Affairs. These included non-Pace visitors who attended events, conferences, meetings, and other activities on our NYC campus during the 2010-2011 fiscal years. These events were categorized as "internal" special events and "external" special events. When actual numbers of non-Pace attendees were not available, we estimated the total Pace attendees to "external" events to be 10% and the number of overnight visitors at external events to be 10% of the total.

Visitors to Pace University may include prospective students, families, conference and special event participants. The visitors were categorized Day Trip and Overnight Visitors. As Pace event surveys of visitor spending are not available, we approximate visitor spending on food, entertainment, accommodation, and travel based on findings of recent comparable reports and publications<sup>2</sup> which were then averaged:

Day trip: \$87.13Overnight: \$212.00

Total visitor spending was estimated to be \$6.1 million. Multipliers for *Retail Trade-Industry Code 28* were applied to the direct visitors spending to determine economic impact.

\_

<sup>&</sup>lt;sup>2</sup> US General Services Administration; NYC & Company; New York Magazine: ("And another fifty just got off the plane." –Published November 27, 2011); Economic Impact of the Lincoln Center (October 2004); Economic Impacts of Greyhound Passengers Visiting New York City (August 2, 2004)

Table 1

# Overall Economic Impact of Pace University NYC Expenditure, Students and Visitors: 2010-2011 Fiscal Year

Actual Spending	Impact Measure	Total Impact
Pace University Expenditure		
\$164,518,188	Output Earnings Employment	\$353,088,935 \$121,694,104 3,158
Student Spending Off-Campus non-Housing		
\$24,642,449	Output Earnings Employment	\$46,349,983 \$14,837,219 478
Student Spending Off-Campus Housing		
\$43,758,231	Output Earnings Employment	\$69,085,496 \$9,189,229 342
Visitor Spending		
\$6,122,667	Output Earnings Employment	\$11,516,124 \$3,686,458 119
Overall Impact		
	Output Earnings Employment	\$480,040,538 \$149,407,009 4,098

Table 2

# **UNIVERSITY EXPENDITURE - NYC Campus - FY2011**

Total Expenditure NYC Campus	\$164,518,188
------------------------------	---------------

Categories	Expenditure
Benefits	\$15,061,624
Construction & Renovation	\$3,891,105
Employee Wages & Salaries	\$64,323,492
NYC Taxes Witheld	\$1,105,169
NYS Taxes Witheld	\$6,224,066
Metropolitan Commuter Transportation Mobility (MCTM) tax	\$417,467
NYC Property Tax	\$711,054
Total Property Tax (NYC & Westchester campuses)	\$944,121
Procurement for NYC Campus	\$4,559,445
Procurement from NYC Vendors	\$734,431
Procurement from NYC Vendors (NYC & Westchester campuses)	\$6,311,134
Scholarships	\$67,464,633
Sponsored Research	\$2,961,050

Source: Bill Voll- Finance Dept.; Wages and Salaries from Matt Renna in HR All values above are for NYC Campus only unless otherwise indicated.

## **Number of Employees**

Туре	Working in NYC	Living in NYC
Full-Time Employee	717	523
Part-Time Employee	902	699
Retiree Receiving Medical Benefits	0	55
Student	905	839
Grand Total	2524	2116

Source: Matt Renna- HR

# **STUDENT SPENDING - NYC Campus - FY2011**

### **In-Residence Students - spending off campus**

	# of Students Summer II 2010	Summer II spending	# of Students Fall 2010	Fall Spending	# of Students Spring 2011	Spring Spending	# of Students Summer I 2011	Summer I Spending	Total Student Spending
Undergraduate	54	\$35,802	1,782	\$2,362,932	1,662	\$2,203,812	70	\$46,410	\$4,648,956
Graduate	9	\$5,967	34	\$45,084	35	\$46,410	13	\$8,619	\$106,080
Total	63	\$41,769	1,816	\$2,408,016	1,697	\$2,250,222	83	\$55,029	\$4,755,036

Non-Residence Students - spending off campus for retail-related

esidence otadents - spending on campus for retain-related									
	# of Students Summer II 2010	Summer II spending	# of Students Fall 2010	IFall Shending	# of Students Spring 2011	Spring Spending	# of Students Summer I 2011	Summer I Spending	Total Student Spending
Undergraduate FT (Dependent)	0	\$0	2,020	\$6,567,020	2,020	\$6,567,020	3	\$4,877	\$13,138,917
Undergraduate FT (Independent)	0	\$0	641	\$689,075	553	\$594,475	12	\$6,450	\$1,290,000
Graduate FT (Dependent)	0	\$0	125	\$406,375	125	\$406,375	0	\$0	\$812,750
Graduate FT (Independent)	0	\$0	522	\$561,150	493	\$529,975	59	\$31,713	\$1,122,838
Undergraduate PT	756	\$121,905	597	\$192,533	782	\$252,195	1,019	\$164,314	\$730,946
Graduate PT	830	\$133,838	1,867	\$602,108	1,665	\$536,963	1,168	\$188,340	\$1,461,248
ELI Students (non Credit)	65	\$105,658	165	\$537,390	171	\$554,377	82	\$133,291	\$1,330,716
Total	1,651	\$361,400	5,937	\$9,555,650	5,809	\$9,441,379	2,343	\$528,984	\$19,887,413

Non-Residence Students - spending off campus for housing-related

	laing on campas for nodeing related								
	# of Students Summer II 2010	Summer II spending	# of Students Fall 2010	IFall Shending	# of Students Spring 2011	Spring Spending	# of Students Summer I 2011	Summer I Spending	Total Student Spending
Undergraduate FT (Independent)	0	\$0	641	\$5,976,684	553	\$5,156,172	12	\$55,944	\$11,188,800
Graduate FT (Independent)	0	\$0	522	\$4,867,128	493	\$4,596,732	59	\$275,058	\$9,738,918
Undergraduate PT	756	\$1,057,342	597	\$1,669,928	782	\$2,187,410	1,019	\$1,425,173	\$6,339,854
Graduate PT	830	\$1,160,838	1,867	\$5,222,372	1,665	\$4,657,338	1,168	\$1,633,565	\$12,674,113
ELI Students (non Credit)	65	\$303,030	165	\$1,541,257	171	\$1,589,975	82	\$382,284	\$3,816,546
Total	1,651	\$2,521,210	3,792	\$19,277,370	3,664	\$18,187,628	2,340	\$3,772,024	\$43,758,231

**Overall Student Spending** 

<u>. Gtadont Openanig</u>		
Category		Total
In-Residence (retail only)		\$4,755,036
Non-Residence (retail)		\$19,887,413
Non-Residence (housing)		\$43,758,231
Retail Total		\$24,642,449
Housing Total		\$43,758,231
	Total Student	
	Spending	\$68,400,681

Sources and notes: In-resident student number per Residential Life. All in-Resident students assumed to be FT

Number of FT students based on Enrollment per OPAIR, adjusted for in-Residence students per Residential Life

Number of Fall and Spring Dependent Students and Summer Independent and Dependent Students per Financial Aid; adjusted for duplicates with Residential Life Independent and Part Time students COA includes \$18,648 for a housing-related Independent Student Living Allowance)

Summer student spending estimated at 25% of COA.

Part Time student spending assumed to be 30% of Full Time Independent COA

In-Residence Cost of Attendance (COA) provided by Financial Aid (Total \$2,652: Books \$800; Transportation \$600; Personal Expenses \$1,252)

Dependent Cost of Attendance (COA) provided by Financial Aid (Total \$6,502: Books \$800; Transportation \$1350; Personal Expenses \$1,252; Meals & Home Maintenance \$3,100)

Independent Cost of Attendance (COA) provided by Financial Aid (Retail \$2,150: Books \$800; Transportation \$1,350; Housing: Independent Student Living Allowance \$18,648)

ELI Winter and Summer Students are not in residence halls; Estimated 95% of Fall and Spring ELI students are not in residence halls.

# Table 4

# **VISITOR SPENDING - NYC Campus - FY2011**

Type of Event			# Daytrip Visitors		•		Total Visitor Spending
"Internal" Special Events	157,698	121,628	26,494	\$2,308,422	9,576	\$2,030,112	\$4,338,534
"External" Special Events	17,497	1,750	12,447	\$1,084,533	3,300	\$699,600	\$1,784,133
	175,195	123,378	38,941	\$3,392,955	12,876	\$2,729,712	\$6,122,667

Source: Pace University Departments of Special Events and Cultural Affairs

Pace Attendees at "external" events estimated at 10%

Overnight visitors at "external" events assumed to be 10% of total unless data otherwise available

Average Spending Per Person: Daytrip \$87.13; Overnight \$212.00

# Calculating the Economic Impact of Pace University New York City

# **Overall Expenditure**

Using Type II Higher Education Industry Final-Demand Multipliers

\$164.5 million in total expenses

2.1462 final-demand output multiplier

= \$353.1 million total output

\$164.5 million in total expenses

0.7397 final-demand earnings multiplier

= \$121.7 million total earnings

\$164.5 million in total expenses

19.1964 finaldemand employment multiplier

**= 3,158 total jobs** 

# Calculating the Economic Impact of Pace University New York City Campus

# Student Spending - Retail Related

Using Type II Retail Trade Industry Final-Demand Multipliers

\$24.6 million in total student spending (retail)

**1.8809** final-demand output multiplier

= \$46.3 million total output

\$24.6 million in total student spending (retail)

**0.6022** final-demand earnings multiplier

= \$14.8 million total earnings

\$24.6 million in total student spending (retail)

**19.4056** final-demand employment multiplier

=478 total jobs

Multipliers retrieved from the RIMS II Multipliers published by the Bureau for Economic Analysis. Related Industry codes were used, in accordance with comparable research (e.g., The Impact of Stony Brook University: Driving the Long Island Economy & John Carroll University: Economic Impact on Northeast Ohio).

# Calculating the Economic Impact of Pace University New York City Campus

# Student Spending - Housing Related

Using Type II Real Estate Industry Final-Demand Multipliers

\$43.8 million in total 1.5788 final-demand = \$69.1 million total student spending output output multiplier (housing) \$43.8 million in total **0.21** final-demand = \$9.2 million total student spending earnings earnings multiplier (housing) \$43.8 million in total 7.8247 final-demand student spending = 342 total jobs employment multiplier (housing)

Multipliers retrieved from the RIMS II Multipliers published by the Bureau for Economic Analysis. Related Industry codes were used, in accordance with comparable research (e.g., The Impact of Stony Brook University: Driving the Long Island Economy & John Carroll University: Economic Impact on Northeast Ohio).

# Calculating the Economic Impact of Pace University New York City Campus

# **Visitor Spending**

Using Type II Retail Trade Industry Final-Demand Multipliers

\$6.1 million in total visitor spending

**1.8809** final-demand output multiplier

= \$11.5 million total output

\$6.1 million in total visitor spending

**0.6022** final-demand earnings multiplier

= \$3.7 million total earnings

\$6.1 million in total visitor spending

**19.4056** final-demand employment multiplier

= 119 total jobs

Multipliers retrieved from the RIMS II Multipliers published by the Bureau for Economic Analysis. Related Industry codes were used, in accordance with comparable research (e.g., The Impact of Stony Brook University: Driving the Long Island Economy & John Carroll University: Economic Impact on Northeast Ohio).