

Almost Too Easy: A New Way to Wrangle IPEDS Data*

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AIR Webinar
August 27th, 2019

*internally referred to as the IPEDS World Domination project



<https://www.smith.edu/about-smith/institutional-research>



<https://provost.tufts.edu/institutionalresearch/>

Thank you Smith College and Tufts University for supporting this project!

Why IPEDS data? Why here? Why now?

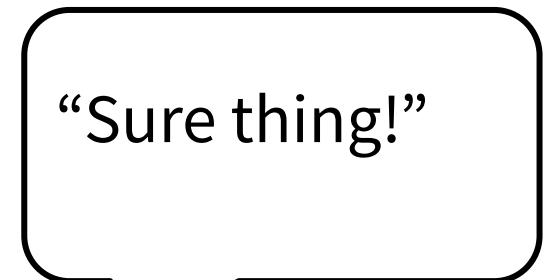


Typical IR Scenario:

Could you compare our institution to 10 specific peer schools on select key metrics from IPEDS?



Typical IR Scenario:



Typical IR Scenario:



“To the IPEDS
Data Center!”

Typical IR Scenario:

This is fantastic! Now can you show the trend for 10 years? And can you add one more peer school?



Typical IR Scenario:



I must mentally collect myself before starting over.

Downloading IPEDS Data Using “Compare Institutions”

Use the Data

Access IPEDS data submitted to NCES through our data tools or download the data to conduct your research



[IPEDS Survey Components](#)

Learn more about the individual IPEDS survey components: view training videos, infographics, answers to frequently asked questions, survey forms, and more.



[Data Trends](#)

Use the Trend Generator to view trends on most frequently asked subject areas including: Enrollment, Completions, Graduation Rates, Employees and Staff, Institutional Revenues, and Financial Aid.



[Compare Institutions](#) ?

Download IPEDS data files for more than 7,000 institutions and up to 250 variables. Data files are provided in comma separated value (*.csv) format.



[Survey Data](#)

Data are available starting with the 1980-81 collection year for the *Complete data files* and *Custom data files* functions, which zip the data into comma separated value (*.csv). Beginning with the 2006-07 collection year, data for each collection year are compiled into an *Access database*.

But this requires you to manually select which variables you want, and which institutions.

Downloading IPEDS Data as “Complete Surveys”

Use the Data

Access IPEDS data submitted to NCES through our data tools or download the data to conduct your research



IPEDS Survey Components

Learn more about the individual IPEDS survey components: view training videos, infographics, answers to frequently asked questions, survey forms, and more.



Data Trends

Use the Trend Generator to view trends on most frequently asked subject areas including: Enrollment, Completions, Graduation Rates, Employees and Staff, Institutional Revenues, and Financial Aid.



Look Up an Institution

Look up information for one institution at a time. Data can be viewed in two forms: institution profile (similar to College Navigator) and reported data (institution's response to each survey question).



Data Feedback Report

Download, print, or customize an institution's Data Feedback Report,



Compare Institutions

Download IPEDS data files for more than 7,000 institutions and up to 250 variables. Data files are provided in comma separated value (*.csv) format.



Survey Data

Data are available starting with the 1980-81 collection year for the *Complete data files* and *Custom data files* functions, which zip the data into comma separated value (*.csv). Beginning with the 2006-07 collection year, data for each collection year are compiled into an *Access database*.

Select download option

Access database

Complete data files 

Custom data files 

And then you realize that each year has to be downloaded as its own data file and an accompanying dictionary.

Complete Data Files

Provisional Release Data (Change)

| Years & Surveys | | All years | Fall Enrollment | Continue |
|--|--|-----------|-----------------|----------|
| Data files are available in ZIP format. | | | | |

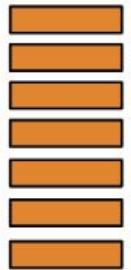
And that the data come down like this:

| UNITID | XAPPLCN | APPLCN | XAPPLCNM | APPLCNM | XAPPLCNW | APPLCNW | XADMSSN | ADMSSN | XADMSSNM | ADMSSNM | XADMSSNW | ADMSSNW | ADMCON1 | | | | | | | |
|--------|---------|--------|----------|---------|----------|---------|---------|--------|----------|---------|----------|---------|---------|--|------|---|--|-------|--|---|
| 100654 | R | | 8610 | R | | 3066 | R | | 5544 | R | | 7772 | R | | 2704 | R | | 5068 | | 1 |
| 100663 | R | | 7555 | R | | 2729 | R | | 4826 | R | | 6936 | R | | 2487 | R | | 4449 | | 1 |
| 100706 | R | | 4454 | R | | 2466 | R | | 1988 | R | | 3618 | R | | 2082 | R | | 1536 | | 1 |
| 100724 | R | | 6842 | R | | 2136 | R | | 4515 | R | | 6696 | R | | 2071 | R | | 4438 | | 1 |
| 100751 | R | | 38129 | R | | 14705 | R | | 23424 | R | | 20321 | R | | 7992 | R | | 12329 | | 1 |
| 100830 | R | | 2474 | R | | 841 | R | | 1633 | R | | 2042 | R | | 715 | R | | 1327 | | 1 |
| 100858 | R | | 18072 | R | | 7841 | R | | 10231 | R | | 15168 | R | | 6576 | R | | 8592 | | 1 |
| 100937 | R | | 2559 | R | | 1098 | R | | 1461 | R | | 1583 | R | | 726 | R | | 857 | | 1 |
| 101189 | R | | 2335 | R | | 878 | R | | 1457 | R | | 1191 | R | | 484 | R | | 707 | | 1 |
| 101365 | R | | 107 | R | | 36 | R | | 71 | R | | 81 | R | | 34 | R | | 47 | | 3 |
| 101435 | R | | 2074 | R | | 1119 | R | | 955 | R | | 1161 | R | | 585 | R | | 576 | | 1 |
| 101453 | R | | 6 | R | | 6 | Z | | 0 | R | | 6 | R | | 6 | A | | | | 3 |

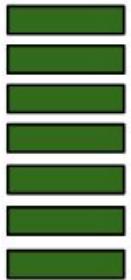


There is a better way

Data files for
each year



Dictionary files
for each year



Beautiful csv



So what starts looking like this:

| UNITID | ADMCON7 | XAPPLCN | APPLCN | XAPPLCNM | APPLCNM | XAPPLCNW | APPLCNW | XADMSSN | ADMSSN | XADMSSNM | ADMSSNM | XADMSSNW | ADMSSNW |
|--------|---------|---------|--------|----------|---------|----------|---------|---------|--------|----------|---------|----------|---------|
| 100654 | 1 | R | 8610 | R | 3066 | R | 5544 | R | 7772 | R | 2704 | R | 5068 |
| 100663 | 1 | R | 7555 | R | 2729 | R | 4826 | R | 6936 | R | 2487 | R | 4449 |
| 100706 | 1 | R | 4454 | R | 2466 | R | 1988 | R | 3618 | R | 2082 | R | 1536 |
| 100724 | 1 | R | 6842 | R | 2136 | R | 4515 | R | 6696 | R | 2071 | R | 4438 |
| 100751 | 1 | R | 38129 | R | 14705 | R | 23424 | R | 20321 | R | 7992 | R | 12329 |
| 100830 | 1 | R | 2474 | R | 841 | R | 1633 | R | 2042 | R | 715 | R | 1327 |
| 100858 | 1 | R | 18072 | R | 7841 | R | 10231 | R | 15168 | R | 6576 | R | 8592 |
| 100937 | 1 | R | 2559 | R | 1098 | R | 1461 | R | 1583 | R | 726 | R | 857 |
| 101189 | 1 | R | 2335 | R | 878 | R | 1457 | R | 1191 | R | 484 | R | 707 |
| 101365 | 2 | R | 107 | R | 36 | R | 71 | R | 81 | R | 34 | R | 47 |
| 101435 | 1 | R | 2074 | R | 1119 | R | 955 | R | 1161 | R | 585 | R | 576 |

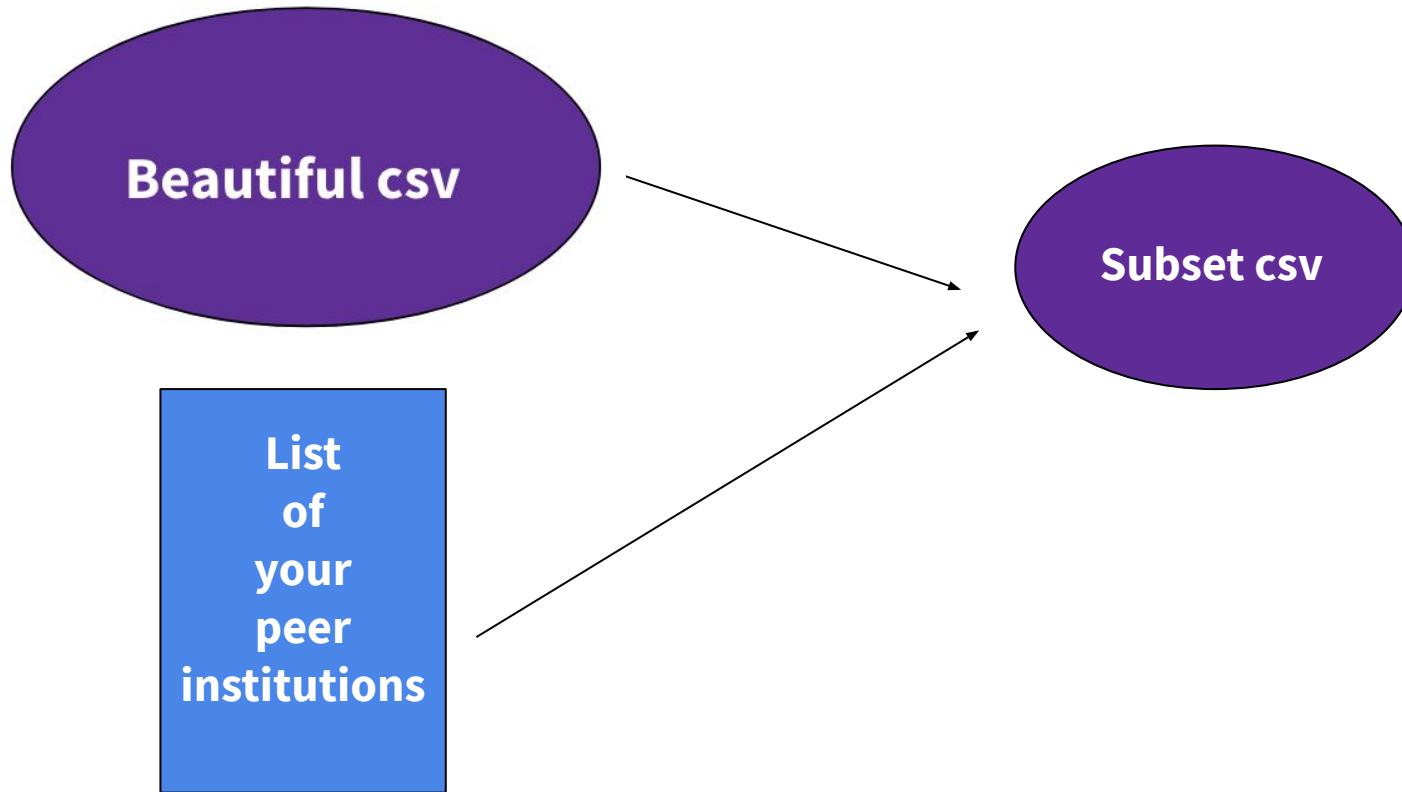
So what starts looking like this:

| UNITID | ADMCON7 | XAPPLCN | APPLCN | XAPPLCNM | APPLCNM | XAPPLCNW | APPLCNW | XADMSSN | ADMSSN | XADMSSNM | ADMSSNM | XADMSSNW | ADMSSNW |
|--------|---------|---------|--------|----------|---------|----------|---------|---------|--------|----------|---------|----------|---------|
| 100654 | 1 | R | 8610 | R | 3066 | R | 5544 | R | 7772 | R | 2704 | R | 5068 |
| 100663 | 1 | R | 7555 | R | 2729 | R | 4826 | R | 6936 | R | 2487 | R | 4449 |
| 100706 | 1 | R | 4454 | R | 2466 | R | 1988 | R | 3618 | R | 2082 | R | 1536 |
| 100724 | 1 | R | 6842 | R | 2136 | R | 4515 | R | 6696 | R | 2071 | R | 4438 |
| 100751 | 1 | R | 38129 | R | 14705 | R | 23424 | R | 20321 | R | 7992 | R | 12329 |
| 100830 | 1 | R | 2474 | R | 841 | R | 1633 | R | 2042 | R | 715 | R | 1327 |
| 100858 | 1 | R | 18072 | R | 7841 | R | 10231 | R | 15168 | R | 6576 | R | 8592 |
| 100937 | 1 | R | 2559 | R | 1098 | R | 1461 | R | 1583 | R | 726 | R | 857 |
| 101189 | 1 | R | 2335 | R | 878 | R | 1457 | R | 1191 | R | 484 | R | 707 |
| 101365 | 2 | R | 107 | R | 36 | R | 71 | R | 81 | R | 34 | R | 47 |
| 101435 | 1 | R | 2074 | R | 1119 | R | 955 | R | 1161 | R | 585 | R | 576 |

Ends up looking like this:

| UNITID | ACAD_YEAR | FILE_NAME | Admission test scores | Applicants total | Applicants men | Applicants women | Admissions total | Admissions men | Admissions women |
|--------|-----------|----------------|-----------------------|------------------|----------------|------------------|------------------|----------------|------------------|
| 100654 | 2007 | ic2006.csv | Required | 9663 | 3774 | 5889 | 3979 | 1656 | 2323 |
| 100654 | 2008 | ic2007.csv | Required | 6470 | 2507 | 3963 | 2059 | 799 | 1260 |
| 100654 | 2009 | ic2008_rv.csv | Required | 3961 | 1664 | 2297 | 1941 | 837 | 1104 |
| 100654 | 2010 | ic2009_rv.csv | Required | 5705 | 2273 | 3432 | 2696 | 1059 | 1637 |
| 100654 | 2011 | ic2010_rv.csv | Required | 5986 | 2557 | 3429 | 3070 | 1264 | 1806 |
| 100654 | 2012 | ic2011_rv.csv | Required | 7156 | 2847 | 4309 | 3585 | 1442 | 2143 |
| 100654 | 2013 | ic2012_rv.csv | Required | 10877 | 4219 | 6658 | 5915 | 2246 | 3669 |
| 100654 | 2014 | ic2013_rv.csv | Required | 6142 | 2401 | 3741 | 5521 | 2100 | 3421 |
| 100654 | 2015 | adm2014_rv.csv | Required | 9901 | 3852 | 6049 | 5204 | 1977 | 3227 |
| 100654 | 2016 | adm2015.csv | Required | 7901 | 3030 | 4871 | 5166 | 1999 | 3167 |
| 100654 | 2017 | adm2016.csv | Required | 7043 | 2725 | 4318 | 6154 | 2276 | 3878 |
| 100654 | 2018 | adm2017.csv | Required | 8610 | 3066 | 5544 | 7772 | 2704 | 5068 |

But you likely don't want all 7,000 institutions....



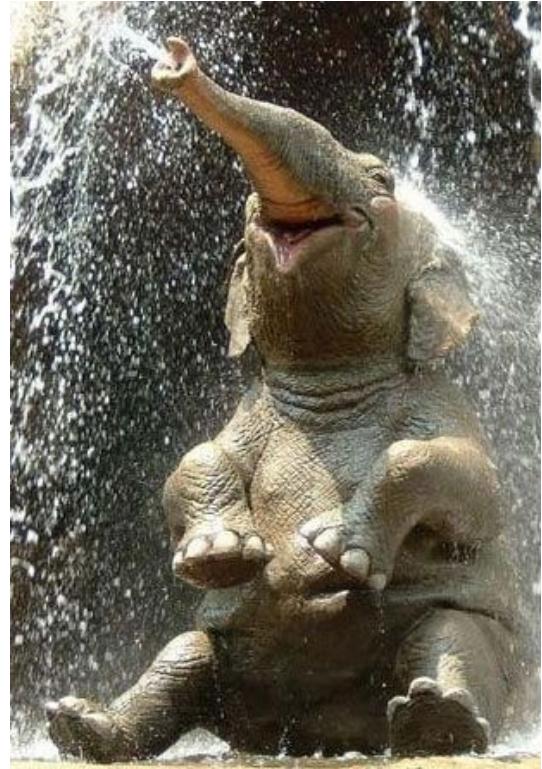
Do I need to know R?



Do I need to know R?



Nope!



Demo

Let us Show you How it Works!

IPEDS Data Compiler

Compiler

FAQ

Welcome to the IPEDS Data Compiler!

Follow the steps below to generate and download a csv file of longitudinal IPEDS data for a custom group of institutions.

Step 1: Upload your list of peers as a csv. Please make sure it contains NCES ID in a column called UNITID. Please note, any columns that you have included in your uploaded file will be joined onto the resulting csv that you download.

See the FAQ for an example peer list.

Choose csv file:

[Browse...](#)

No file selected

Choose csv file:

Browse...

small_bacc_MA.csv

Upload complete

Show 5 entries

Search:

| UNITID | INSTITUTION NAME | CARNEGIE CLASSIFICATION 2015: BASIC (HD2017) | SECTOR OF INSTITUTION (HD2017) | INSTITUTION SIZE CATEGORY (HD2017) | STATE ABBREVIATION (HD2017) |
|--------|------------------|--|--------------------------------|------------------------------------|-----------------------------|
| 1 | 164465 | Amherst College | 21 | 2 | 2 MA |
| 2 | 166124 | College of the Holy Cross | 21 | 2 | 2 MA |
| 3 | 165671 | Emmanuel College | 21 | 2 | 2 MA |
| 4 | 165936 | Gordon College | 21 | 2 | 2 MA |
| 5 | 166018 | Hampshire College | 21 | 2 | 2 MA |

Showing 1 to 5 of 10 entries

Previous

1

2

Next

Your peer list contains 10 institutions.

Your peer list contains 10 institutions.

Step 2: Select an IPEDS survey from the dropdown list.

Select survey:

Applications, admissions, enrollees and test

Step 3: Press the button below to see a preview of the first 10 columns of the dataset.

It may take a couple of minutes for your file to load.

 Dominate the World!

| UNITID | ACAD_YEAR | FILE_NAME | TABLE_TRIM | Academic | Academic_value | Academic/career counseling service |
|--------|-----------|-----------|------------|----------|----------------|------------------------------------|
| 1 | 164465 | 2007 | ic2006.csv | IC | Yes | 1 |
| 2 | 165671 | 2007 | ic2006.csv | IC | Yes | 1 |
| 3 | 165936 | 2007 | ic2006.csv | IC | Yes | 1 |
| 4 | 166018 | 2007 | ic2006.csv | IC | Yes | 1 |
| 5 | 166124 | 2007 | ic2006.csv | IC | Yes | 1 |
| 6 | 166939 | 2007 | ic2006.csv | IC | Yes | 1 |
| 7 | 167996 | 2007 | ic2006.csv | IC | Yes | 1 |
| 8 | 168218 | 2007 | ic2006.csv | IC | Yes | 1 |
| 9 | 168281 | 2007 | ic2006.csv | IC | Yes | 1 |
| 10 | 168342 | 2007 | ic2006.csv | IC | Yes | 1 |

Showing 1 to 10 of 120 entries

Previous

1 2 3 4 5 ... 12

This survey contains academic (fiscal) years from 2007 to 2018. Please see the FAQ for more information about the years contained in this file.

Step 4: Once the table renders, press the button below to download your compiled csv file.

 Download CSV

Tableau - Demo Viz

Data Analytics

adm_compiled

Search

Dimensions

- # Acad Year
- Abc Academic
- Abc Academic/career counseling service
- Abc Admission test scores
- Abc Adult basic remedial or high school equivalent
- Abc Advanced placement (AP) credits
- Abc All programs offered completely via distance education
- Abc Any alternative tuition plans offered by institution
- Abc Application fee is required
- Abc Associate's degree
- Abc Bachelor's degree
- =Abc c_fall_spring

Measures

- # Academic value
- # Academic/career counseling service value
- # ACT Composite 25th percentile score
- # ACT Composite 75th percentile score
- # ACT English 25th percentile score
- # ACT English 75th percentile score
- # ACT Math 25th percentile score
- # ACT Math 75th percentile score
- # ACT Writing 25th percentile score
- = ACT Writing 75th percentile score

Pages

Columns

Rows

Filters

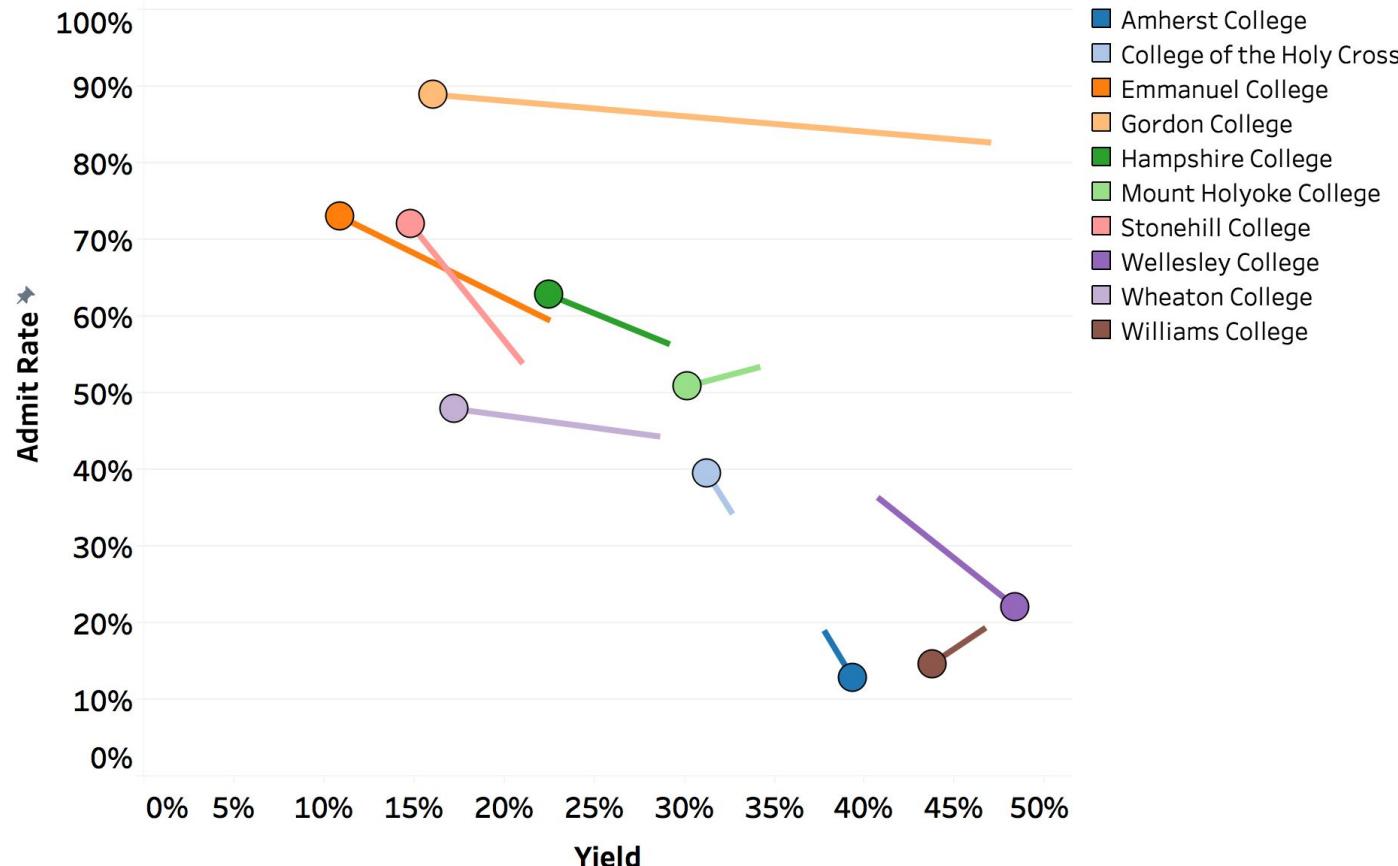
Marks

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

Drop field here

Admit Rate and Yield

Change from 2007 to 2018



| A | B | C | D | E | F |
|--------|---------------------------|----------------|----------------|------------------|--------------------|
| UnitID | Institution Name | Carnegie Class | Sector of inst | Institution size | State abbreviation |
| 164465 | Amherst College | 21 | 2 | 2 | MA |
| 166124 | College of the Holy Cross | 21 | 2 | 2 | MA |
| 165671 | Emmanuel College | 21 | 2 | 2 | MA |
| 165936 | Gordon College | 21 | 2 | 2 | MA |
| 166018 | Hampshire College | 21 | 2 | 2 | MA |
| 166939 | Mount Holyoke College | 21 | 2 | 2 | MA |
| 167996 | Stonehill College | 21 | 2 | 2 | MA |
| 168218 | Wellesley College | 21 | 2 | 2 | MA |
| 168281 | Wheaton College | 21 | 2 | 2 | MA |
| 168342 | Williams College | 21 | 2 | 2 | MA |
| 167835 | Smith College | | | | |

Choose csv file:

[Browse...](#)

small_bacc_MA.csv

Upload complete

Show [5](#) entries

Search:

| UNITID | INSTITUTION NAME | CARNEGIE CLASSIFICATION 2015: BASIC (HD2017) | SECTOR OF INSTITUTION (HD2017) | INSTITUTION SIZE CATEGORY (HD2017) | STATE ABBREVIATION (HD2017) |
|--------|------------------|--|--------------------------------|------------------------------------|-----------------------------|
| 1 | 164465 | Amherst College | 21 | 2 | 2 MA |
| 2 | 166124 | College of the Holy Cross | 21 | 2 | 2 MA |
| 3 | 165671 | Emmanuel College | 21 | 2 | 2 MA |
| 4 | 165936 | Gordon College | 21 | 2 | 2 MA |
| 5 | 166018 | Hampshire College | 21 | 2 | 2 MA |

Showing 1 to 5 of 11 entries

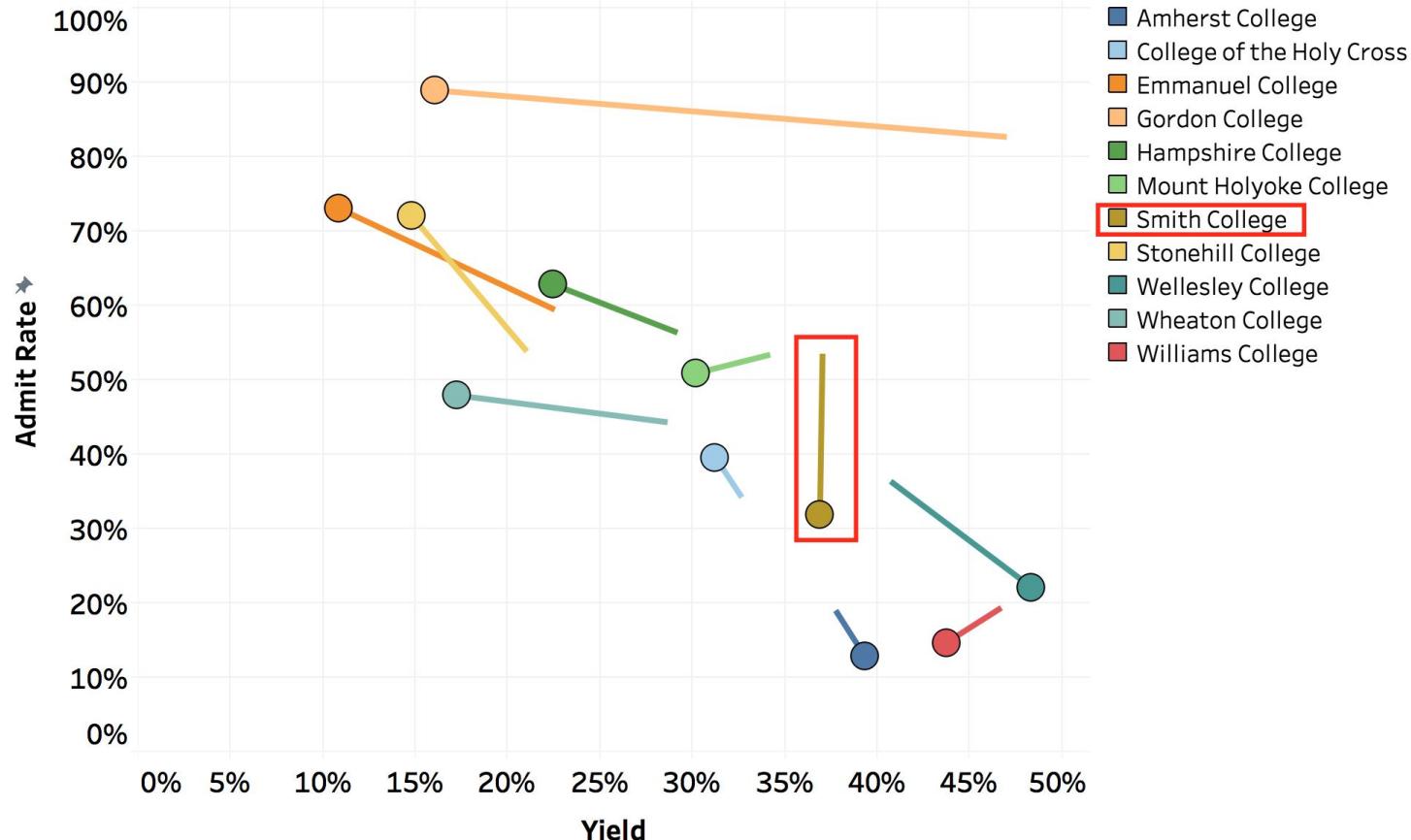
Previous

[1](#) [2](#) [3](#) Next

Your peer list contains 11 institutions.

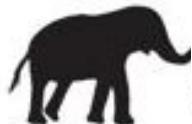
Admit Rate and Yield

Change from 2007 to 2018



Future Design Enhancements

- Option for user to select specific years



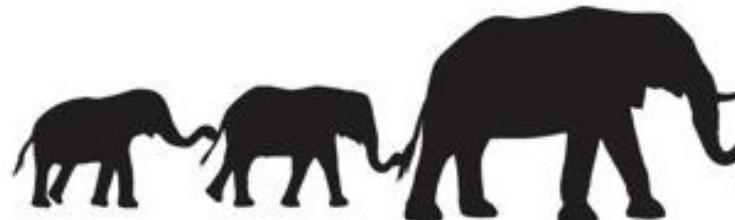
Future Design Enhancements

- Option for user to select specific years
- Inclusion of additional years



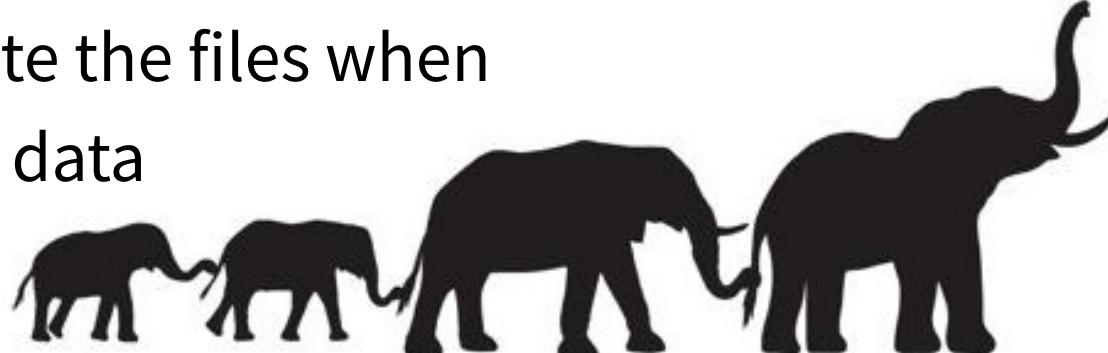
Future Design Enhancements

- Option for user to select specific years
- Inclusion of additional years
- Expanded peer selection options
 - Based on IPEDS variables
 - User manually inputs list



Future Design Enhancements

- Option for user to select specific years
- Inclusion of additional years
- Expanded peer selection options
 - Based on IPEDS variables
 - User manually inputs list
- Automatically update the files when IPEDS releases new data



Wanna use it?

You only need two things --

- (1) Your peer list, saved as a csv
- (2) The link to the app!

<https://tinyurl.com/ipeeds-compiler>

Questions?



<https://tinyurl.com/ipeds-compiler>

Thank You!

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<https://tinyurl.com/ipeds-compiler>