

Strategic Initiatives & New Ventures

April 21, 2017



WILLIAM & MARY

CHARTERED 1693

Update on Regional Activity



The New York Times

Sunday Review | OPINION

A New Map for America

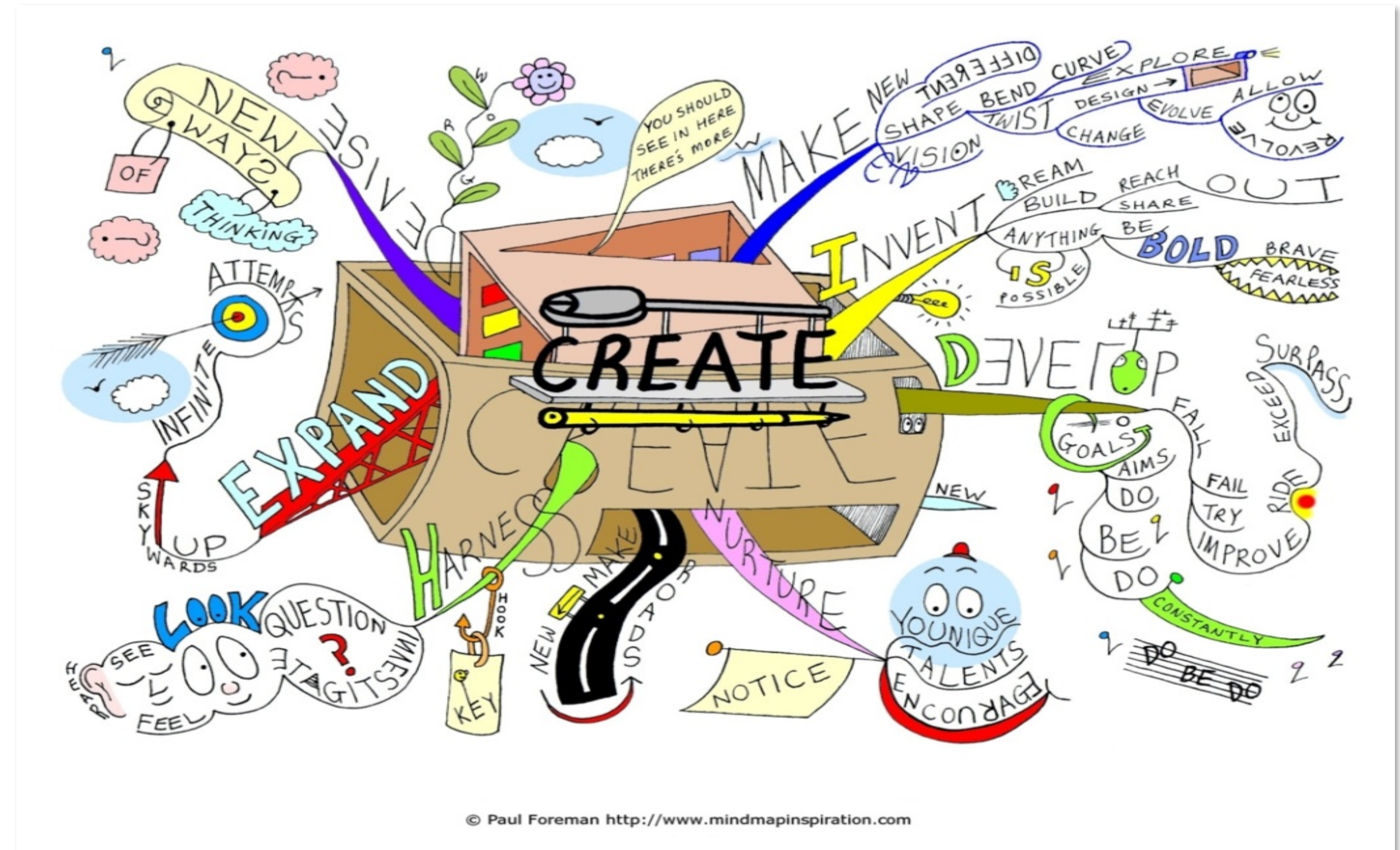
By PARAG KHANNA APRIL 15, 2016

"Socially and economically, America is reorganizing itself around regional infrastructure lines and metropolitan clusters that ignore state and even national borders."

"The 21st century will not be a competition over territory, but over connectivity...global trade volumes, investment flows and supply chains. "

Bottom Line

- We need to continue to better connect the region, build on strengths and fundamentally alter the region's economic profile and performance over time.
 - Improve the connectivity of transportation and broadband
 - Create more higher paying jobs
 - Create a culture where entrepreneurship can thrive
 - Diversify the economy
- Requires regional thinking to prioritize economic growth and address workforce gaps.



A New Map for America is Needed to Compete Globally

- According to a recent N.Y. Times article ,“A New Map for America” by Parag Khanna, there are already seven distinct super-regions in America defined by common economics and demographics.
- The super-regions are being created through enhanced connectivity between mega-regions through superior highways, railways, fiber-optic cables and other infrastructure.
- Advanced economies in Western Europe and Asia are reorienting themselves around robust urban clusters whose economies are centered on advanced industries.
 - Italy is centering its power within 14 “Metropolitan Cities” (ex: Rome, Turin, Milan and Florence).
 - The metropolitan cities have been legislatively merged with surrounding municipalities to form larger sub-regions.
- China is leading the world to become a nation of 26 megacity clusters with populations of up to 100 million each.

An Economic Geography of the United States: From Commutes to Megaregions

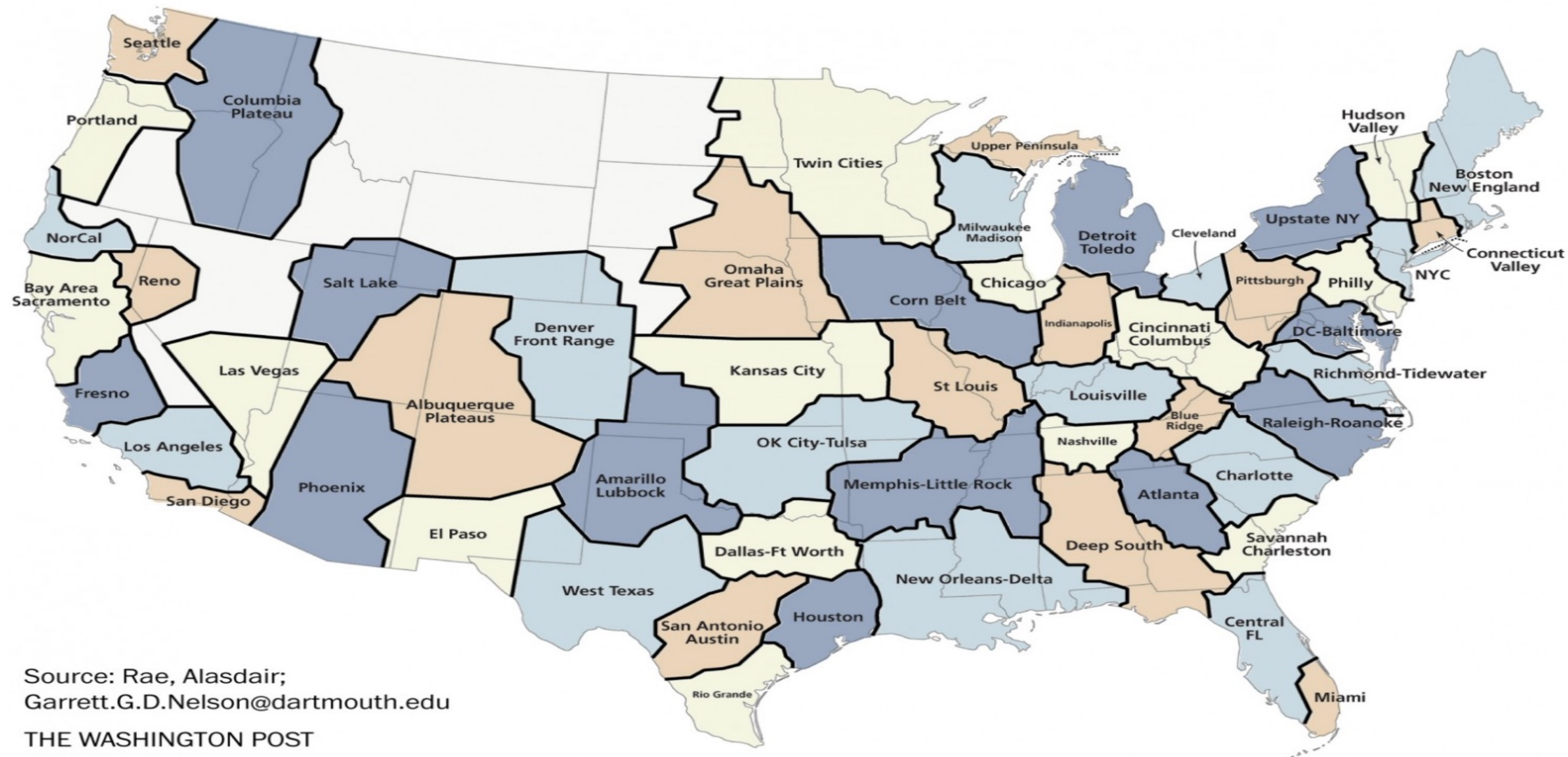
Garrett Dash Nelson , Alasdair Rae  

 OPEN ACCESS  PEER-REVIEWED

Published: November 30, 2016 • <http://dx.doi.org/10.1371/journal.pone.0166083>

- “The detection of recognizable communities through this computational analysis suggests that human geography does in fact display statistically-significant patterns of structured regionalization, and that this regionalization matches interpretive descriptions of ‘megaregions.’”
- Significant investment in infrastructure connectivity is creating the “connectography” referred to by Khanna.

What the U.S. Map Should Really Look Like



Source: Rae, Alasdair;
Garrett.G.D.Nelson@dartmouth.edu
THE WASHINGTON POST

Key Benefits of a Mega-Region Designation

- Federal agencies use the Office of Management and Budget's designation of MSA or CSA for collecting, tabulating and publishing federal statistics.
- Stronger ability to secure federal funding for infrastructure development.
 - The U.S. Department of Transportation has developed the Multistate Corridor Operations Management (MCOM) program. The program awards grants to regions that demonstrate collaboration.
- Greater connectivity of workers, visitors and freight and enhanced connectivity to world markets.
 - Approximately 85% of High Speed Rail investment by the federal government as of March 2013 was concentrated in six regions that encompass major Global Gateway Regions.
- Enhanced ability to attract corporate investment, which hopefully, will result in job creation.
 - Approximately 99% of institutional investment in commercial real estate was within the 11 Global Gateway Regions as indicated in the NCREIF database as of fourth quarter 2012.
- Larger corporate advertising spending.
 - The largest spending on advertising is concentrated in top 25 MSAs.

Combined Physical Size and Population

- If the Richmond and Hampton Roads MSAs collaboratively aligned and became recognized as one region, together the two would have a population larger than the 17th largest MSA, according to the most recent 2015 U.S. census population figures.
- Together, the Richmond MSA and Hampton Roads MSA economic output of gross product in 2015 was \$172.5 billion and ranks as the 20th highest of the MSAs producing the most product, according to a report created for the U.S. Conference of Mayors.
 - Not combined, Hampton Roads would rank 39th among all MSAs in the U.S. and Richmond would rank as the 43th highest.
- The two regions are geographically close to one another.
 - The Port of Virginia in Norfolk is approximately 80 miles from the I-95/I-85 interchange and the I-95/I-64 interchange in Richmond and the eastern end of the Richmond MSA abuts the western end of the Hampton Roads MSA.
- An effort to combine the Hampton Roads and Richmond MSAs would not compete with discussions of extending the Baltimore-DC-NOVA mega-region to include Greater Richmond but is complimentary to such efforts.

Virginia's Global Gateway

- Number 3 deepwater port in East Coast and growing: Over \$4 billion in recent committed investment in ports, roads, and waterways to date. Large rail cap-ex committed by CSX and Norfolk Southern.
- Trio of similar investments by Microsoft, Facebook, Telefónica and NxtVn are turning Virginia Beach into a digital port; 4,000 mile underwater fiber-optic cable from Southern Europe to Virginia Beach 7,000 mile fiber-optic cable from Brazil to Virginia; and another planned from Northern Europe to Virginia Beach.
- Space Port at Wallops Island.

The All-Important Technology Sector is Present

- Technology assets include:
 - Federal labs
 - Military centers
 - High-tech initiatives at the regions' colleges and universities
 - Virginia Biotechnology Research Park
 - Jefferson National Accelerator Facility
 - Universities
- Emphasis on continued development of technology sectors
 - Commonwealth Center for Advanced Manufacturing (CCAM)
 - Commonwealth Center for Advanced Logistics Systems (CCALS)
- Organizations in both regions are committed to enhancing entrepreneurial efforts and connecting the benefactors of the innovations developed by startups, universities and other innovators in both regions.

Growth and Opportunity (GO) Grants: *Potential Projects*

- Scale-ups of existing small and medium-sized businesses (REAP – Regional Export Assistance Program)
- Credentialing and business focused training and curriculum development
- Site development
- Commercialization of R&D (public and private)
- Cross-regional collaborations, e.g., Bioscience/Life neuroscience
- Startup collaborations (incubators/accelerators)

William & Mary

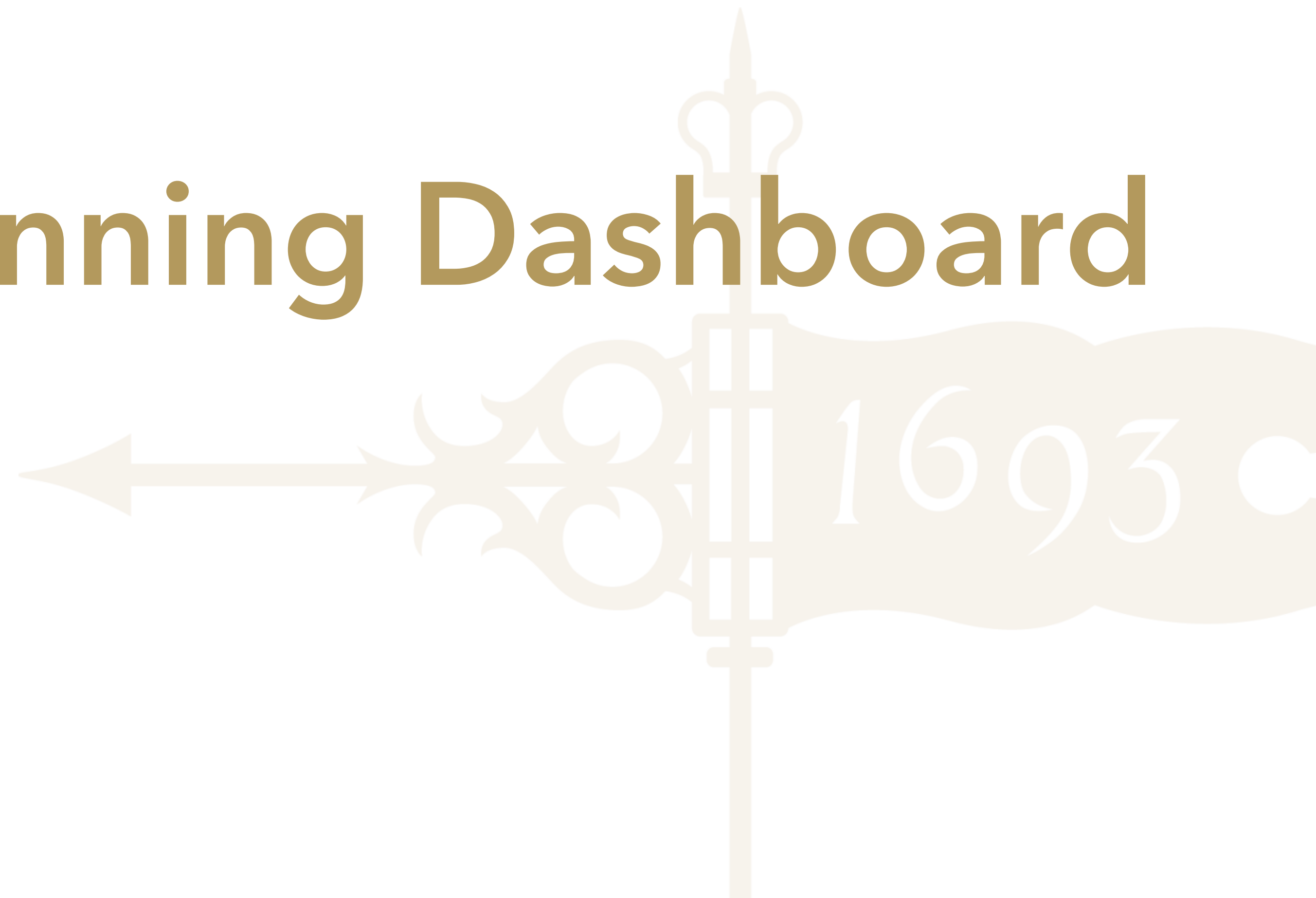
- Regions around the world are reorganizing themselves around infrastructure lines and metropolitan clusters, William & Mary has the opportunity to be a leader in Southeast, Virginia.
- A rising tide lifts all boats.
- Strategic position between two growing and growing together regions.
- Cluster development creates eco-systems in numerous industries.
 - Universities benefit by funded opportunities to enter into translational research joint ventures.
 - As a well known thought leader, William & Mary can create and expand its curriculum in fields related to regional growth: government, business, public policy, economics, healthcare, bioscience, etc. Recent examples are Masters of Analytics and possible Masters in Bioinformatics.
- A vibrant region helps to attract faculty and students and helps with spousal employment.
- The University also needs the surrounding region to absorb some of its graduating students.
- Regional cultural, sports and recreation improvements enhance quality of life. The stronger the region; generally the more that's available.
- Examples of other Universities, including original the basis of land grant Universities.

UEDA

UEDA is an association that focuses specifically on the issue of universities and economic development:

“We advance knowledge and practice in higher education economic engagement. Higher education institutions, private sector businesses and economic development organizations are at the nexus of modern economic growth. Never in history have partnerships between these three sectors been more important in creating sustained economic opportunities in our communities throughout the country...UEDA’s members work to expand economic opportunity and prosperity in our communities and regions by leveraging education / talent development; research and technology development; and community-building and place-making strategies.”












Strategic Planning Dashboard



STRATEGIC PLANNING DASHBOARD

= NEW DATA









= UNAVAILABLE DATA

CHALLENGE : Leading Liberal Arts University									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
1	Undergraduate acceptance rate		33.7%	33.2%	33.0%	34.5%	36.5%	34%	30% (2015-16)	9% (2015-16)
2	Undergraduate yield rate		36.8%	31.7%	31.4%	29.5%	28.7%	34%	40% (2015-16)	56% (2015-16)
3	Undergraduate SAT scores: 25th - 75th percentile range		1250-1450	1270-1460	1270-1470	1260-1460	1250-1470	1250-1450	1250-1460 (2015-16)	1370-1560 (2015-16)
4	Undergraduate graduation rate: completions within 6 years		91%	90%	90%	91%	Available 4/2018	95%	93% (2009 cohort)	96% (2009 cohort)
5	Student-faculty ratio		11:1	12:1	12:1	12:1	12:1	12:1	15:1 (2015-16)	7:1 (2015-16)
6	Small undergraduate classes: percent with 2- 19 students		49%	48%	48%	49%	49%	50%	56% (2015-16)	70% (2015-16)
7	USNWR: Best Undergraduate Teaching		N/A	2	4	12	Available 9/2017	1	N/A	4 (2015-16)
8	Gap between avg. faculty salary and 60th percentile of SCHEV peers		N/A	20.1%	15.7%	17.7%	Available 4/2018	60th pctl.	N/A	N/A
CHALLENGE : Diversity									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
9	Undergraduate students who are members of historically underrepresented groups		20%	28%	29%	29%	29%	N/A	29% (2015-16)	37% (2015-16)
10	Graduate/professional students who are members of historically underrepresented groups		13%	15%	14%	16%	18%	N/A	18% (2015-16)	23% (2015-16)
11	Undergraduate Pell grant recipients		9%	12%	11%	11%	Available 3/2018	N/A	13% (2014-15)	16% (2014-15)

STRATEGIC PLANNING DASHBOARD

= NEW DATA












= UNAVAILABLE DATA

CHALLENGE : Global Engagement									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
12	Undergraduate students with international citizenship		2%	4%	5%	6%	6%	N/A	5% (2015-16)	13% (2015-16)
13	Graduate students with international citizenship		8%	15%	15%	14%	14%	N/A	16% (2015-16)	30% (2015-16)
14	Undergraduate students who study abroad		N/A	48%	50%	51%	Available 9/2017	60%	N/A	N/A
15	Total international student enrollment		N/A	575	667	687	691	600	N/A	N/A
16	Total countries with students enrolled		N/A	55	58	65	61	60	N/A	N/A
CHALLENGE : Lifelong Connection									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
17	Alumni giving participation rate: undergraduates with degrees		21.9%	24.9%	27.1%	28.6%	Available 9/2017	40%	20% (2015-16)	28% (2015-16)
CHALLENGE : Communications									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
18	USNWR: National Universities		32	33 (tie)	34 (tie)	32 (tie)	Available 9/2017	N/A	24 (tie) (2015-16)	14 (2015-16)
19	USNWR: Public Universities		6	6	6	6	Available 9/2017	N/A	2 (tie) (2015-16)	N/A

STRATEGIC PLANNING DASHBOARD

= NEW DATA

= UNAVAILABLE DATA

CHALLENGE : Business Plan									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
20	USNWR: Financial Resources		111	110	113	112	Available 9/2017	70	55 (2015-16)	22 (2015-16)
21	Total sponsored program expenditures (in millions)		\$50	\$59	\$61	\$63	Available 4/2018	\$60	\$329 (2014-15)	\$110 (2014-15)
22	Debt service as percent of operating expense		N/A	5.7%	5.6%	5.9%	Available 9/2017	7%	N/A	N/A
23	Annual giving to the Fund for W&M plus expendable scholarships (in millions)		\$5.6	\$6.8	\$8.6	\$8.2	Available 9/2017	\$9	N/A	N/A
24	Total annual giving not including gifts >\$100K (in millions)		\$13.6	\$19.0	\$20.6	\$21.3	Available 9/2017	\$22	N/A	N/A
25	Total new private gifts and commitments (in millions)		\$39	\$104	\$106	\$143	Available 9/2017	\$100	N/A	N/A
26	Endowment per student (year end)		N/A	\$99,388	\$100,572	\$99,381	Available 10/2017	\$175,000	\$277,100 (2014-15)	\$349,520 (2014-15)
27	Total endowment (in millions)		\$586	\$798	\$811	\$804	Available 10/2017	\$1,500	\$6,181 (2014-15)	\$3,073 (2014-15)
28	Average per-borrower cumulative undergraduate debt		\$16,765	\$25,733	\$26,017	\$26,400	Available 2/2018	\$20,000	\$24,905 (2015 grads)	\$22,197 (2015 grads)
29	Undergraduate students who graduate with debt		39%	38%	37%	35%	Available 2/2018	40%	35% (2015 grads)	34% (2015 grads)
CHALLENGE : Administrative Resources and Infrastructure									COMPARISONS	
	MEASURES	10-yr Trend (up=positive)	10 Yrs Ago (2007-08)	2013-14	2014-15	2015-16	2016-17	TARGET	UVA	BROWN
30	All E&G Facilities Condition Index		12.4%	5.7%	5.8%	4.8%	4.6%	10%	5% (2014-15)	N/A

Pell Grant Recipients

Pell Grant Recipients

(IPEDS Data for 2014-2015 Enrollments)

UCLA	39%
Harvard	18%
Princeton	13%
UVA	13%
W&M	11%
Notre Dame	11%

Pell Grant Recipients

SCHEV Data for 2014-2015 Enrollments

	Overall	In-State	Out-of-State
UVA	13.0%	14.6%	9.9%
W&M	11.7%	14.6%	6.0%

Pell Grant Recipients

SCHEV Data for 2014-2015 Enrollments

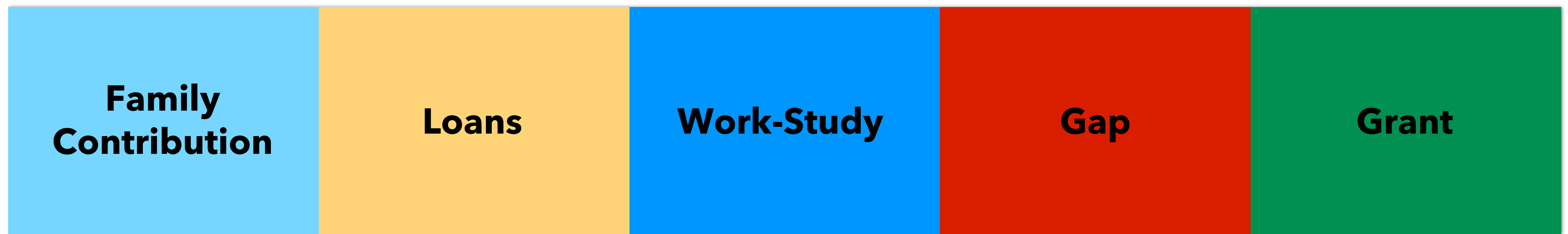
	Overall	In-State	Out-of-State
UVA	13.0%	14.6%	9.9%
W&M	11.7%	14.6%	6.0%

SCHEV Data for 2015-2016 Enrollments

	Overall	In-State	Out-of-State
UVA	12.4%	13.9%	9.4%
W&M	12.0%	14.9%	6.0%

Net Price

Net Price



← Full/Sticker Price →

← Financial Need →

← Net Price →

Net Price for In-State Families Who Qualify for Financial Aid

Lowest Avg. Net Price (2014-2015)

1. UVA-Wise (\$11,259)

2. NSU (\$13,468)

3. Radford (\$13,903)

4. W&M (\$14,310)

5. VSU (\$14,438)

(Source: U.S. Dept.
of Education's
College Navigator)

Net Price for In-State Families Who Qualify for Financial Aid

\$0 - \$30K	\$30K - \$48K	\$48K - \$75K
1. W&M (\$4,049)	1. W&M (\$4,997)	UVA-Wise (\$10,459)
2. VMI (\$6,189)	2. VMI (\$5,405)	2. W&M (\$10,982)
3. UVA-Wise (\$8,624)	3. UVA-Wise (\$8,738)	3. VMI (\$12,308)
4. UVA (\$10,119)	4. UVA (\$11,559)	4. NSU (\$13,946)
5. ODU (\$11,678)	5. NSU (\$12,411)	5. VSU (\$15,954)