



BENCHMARKING ANALYSIS

R2 Best Practices

Prepared for the University of
Colorado – Colorado Springs

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In the following report, Hanover examines several national R2 institutions to determine their approaches to R2 designation, supplemented by a discussion of the varying Carnegie classifications.



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EXECUTIVE SUMMARY

RECOMMENDATIONS

Based on an analysis of best practices and the practices of national R2 institutions, Hanover recommends that the University of Colorado – Colorado Springs (UCCS) should:



ENSURE THAT AN INCREASED EMPHASIS ON RESEARCH DOES NOT DETRACT FROM UNDERGRADUATE EDUCATION.

While R2 status brings with it significant advantages in terms of institutional reputation, increased ability to attract grants, funding, and faculty, and potentially the ability to better serve students and UCCS's local community, UCCS must not lose sight of its primary mission. Institutions can sometimes put too great of an emphasis on research and advancing beyond R2 status to R1 status, causing them to focus too strongly on graduate study and research. This can lead to erosion in the quality of undergraduate education at the institution, which is antithetical to the vision of UCCS.



CONSIDER OFFERING FORMAL TRAINING OF FACULTY AND STAFF ON THE BENEFITS AND CHALLENGES OF R2 STATUS.

R2 designation signals UCCS' growth in research and reputation. The institution should ensure that its faculty and staff are aware of the benefits this status can bring to them, such as increased funding and the potential to expand faculties or facilities. At the same time, UCCS should make faculty aware of some of the challenges, again serving to help ensure that the institution and its staff can remain focused on the entirety of UCCS' mission as an institute of higher education and retain the best of their pre-R2 practices while "levelling up."



EXPLORE PARTNERSHIPS WITH LOCAL EDUCATIONAL OR BUSINESS ENTITIES IN ORDER TO SECURE GREATER RESEARCH, TEACHING, AND FINANCIAL RESOURCES.

One benchmarked peer, Rowan University, has seen significant growth and expansion since attaining R2 status. One of the ways it has ensured it could both expand its research capacity and its ability to serve students was through partnerships with local community colleges and businesses. These helped secure revenue as well as control costs for students who pursued these new degree pathways. UCCS should consider such partnerships to help ensure its new status continues to serve its institutional mission and its constituencies.

KEY FINDINGS

Carnegie's R2 status, its second-highest classification, designates a high level of research activity—though the way these categories are defined will change in 2025. Currently, to earn R2 designation, an institution must award 20+ research-focused doctoral degrees and spend more than \$5Mil on research. R1, the highest designation, has similar base requirements but looks at a variety of (opaque) metrics to determine whether an institution has high (R2) or very high (R1) research output. The metrics for research—and potentially for other aspects of the basic classification schema—are set to change in as-yet unspecified ways in 2025 as Carnegie aims to integrate other aspects of its institutional mission into its classification.

R2 classification can help institutions better serve their students, faculty, and community, though institutions must be careful not to lose sight of their mission in pursuit of higher research rankings. R2 classification often boosts institutional rankings and recognition, making it easier for them to acquire governmental funding and attain high-value research grants. Recruiting new faculty and offering novel programs designed to meet community needs also becomes easier. Research also shows that R2 status can make it easier for institutions to serve more diverse student communities. Risks to the status include losing sight of the institutional mission and diminishing focus on undergraduate education in favor of research.







UCCS lags behind its peers in terms of both research expenditure and the number of offered graduate programs. On average, benchmarked institutions spent \$24,578,000 on research in 2021, nearly 5 times UCCS's expenditure. Similarly, institutions offered an average of 10 doctoral programs and 65 master's programs, both more than UCCS's offerings. This is not a critique of any university but a reference point of industry standards.

Few institutions discuss initiatives or strategies for implementing R2 status institution-wide, though some emphasize classification benefits and seek to expand research and educational capacities. Hanover could only identify one institution, Rowan University, which explicitly provided insight into its post-R2 strategy. Rowan emphasized partnerships with local community colleges to help increase educational pathways for undergraduates and keep costs low, launched new doctoral programs, and intends to hire 50 new faculty members, build new facilities and research centers, and expand its medical campus offerings.

METHODOLOGY

The University of Colorado – Colorado Springs (UCCS) was granted R2 classification in 2019, the second-highest Carnegie designation, in recognition of the growth of the university and its increasing graduate student graduation rates and research initiatives and funding. While several years have passed since this classification was earned, UCCS faces several challenges in fully embracing its R2 status. It has fewer resources to spare than many of its R2 peers and several members of university leadership have limited experience in R2 institutions. As such, UCCS leadership has partnered with Hanover Research to examine how other institutions have approached R2 status. Hanover presents here the results of a benchmarking analysis of six national institutions that recently attained R2 status, focusing primarily on their research expenditures, graduate programming, and any insights available into how they navigated the messaging and implementation of R2 status at their institutions. A brief overview of the Carnegie classification system, upcoming changes, and the benefits of R2 status are also included.

BENCHMARKED INSTITUTIONS

Institution	Location	Carnegie Designation	Year R2 Attained
 Tarleton State University	Stephenville, TX	R2	2021
 University of North Florida	Jacksonville, FL	R2	2022
 University of Nebraska Omaha	Omaha, NE	R2	2019
 Mercer University	Macon, GA	R2	2018
 Prairie View A&M University	Prairie View, TX	R2	2021
 Rowan University	Glassboro, NJ	R2	2018

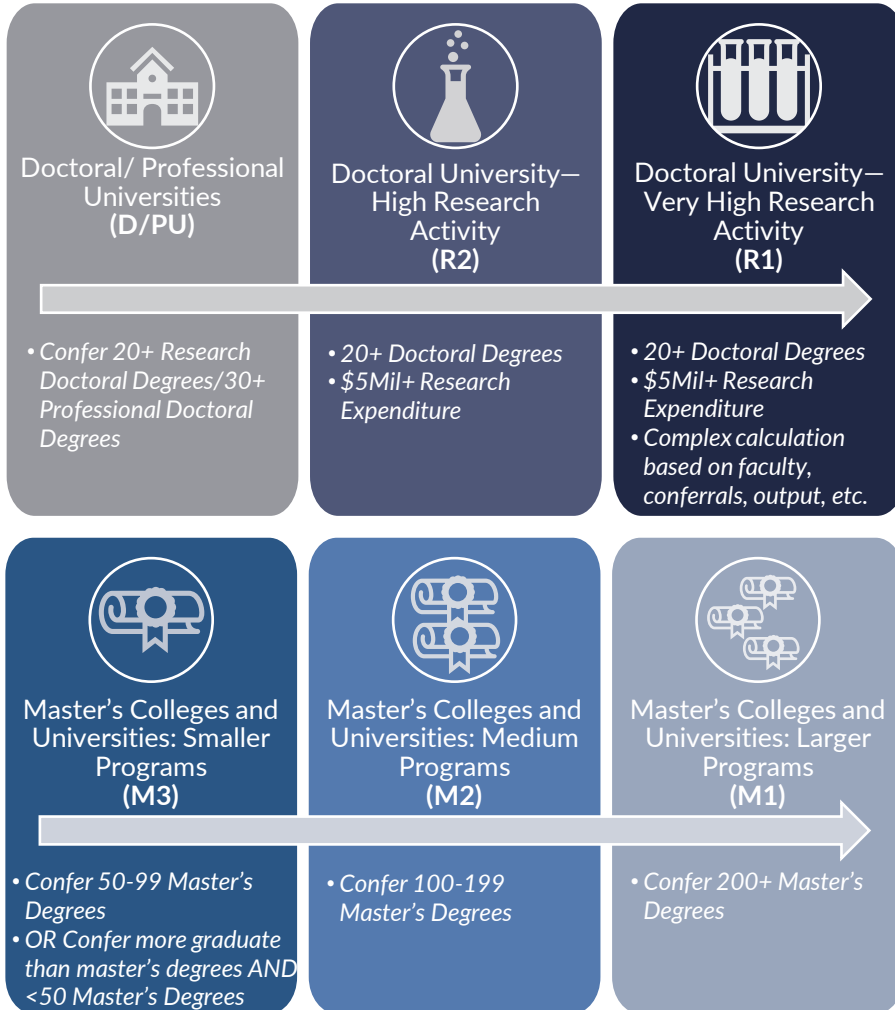
BACKGROUND

*Carnegie Classification and the
Benefits of R2 Status*

CARNEGIE DESIGNATIONS

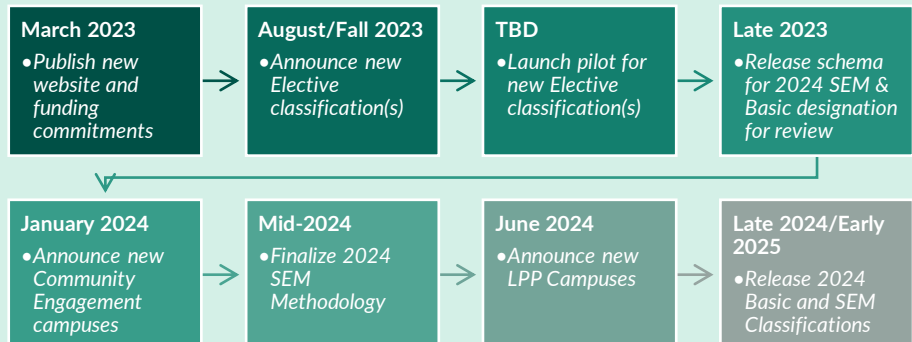
DESIGNATIONS AND DEFINITIONS

The below definitions for each designation are based on data for the 2019/2020 school year. Other designations also exist for lower levels (Baccalaureate and Associate).



CHANGING DESIGNATIONS

Carnegie's Classification methodology is scheduled to change in 2025. While many of the designations are relatively straightforward, depending on the number of degrees conferred at a certain level, the differentiation between R2 and R1 is the result of a complex calculation looking at a variety of factors. With classifications updated every three years, Carnegie often takes the time in the interim to revise its methodology, usually by minor alterations. By 2025, however, Carnegie intends to significantly revise the cycle, primarily focusing on how research is classified and integrating other aspects of a university's mission into the calculation. Indeed, even Carnegie acknowledges the current complexities and difficulties of navigating R2 and R1 designations: "determining which of those universities should be categorized as R1 involves an evaluation of institutional data with a complicated 10-metric formula that uses normative and relative scores. The result is an opaque process and a moving target that makes it impossible to determine exactly what a university must do to become classified as R1." While the changes are not yet finalized, the changes intend to change how institutions think about the classifications, aiming to make them more descriptive rather than to act as rankings: "our hope is that the power of a classification is to identify institutions that are doing better on some number of things, and then to create learning communities for them, to improve on others, or to share best practices, or to otherwise be organized."



VALUE AND CHALLENGES OF R2 DESIGNATION

BENEFITS OF R2 CLASSIFICATION

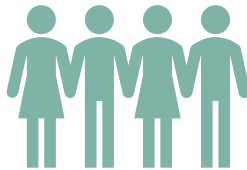
R2 designation brings tangible benefits to institutions. While most institutions seek R2 designation for the increase in reputation and funding opportunities that often accompany advancement in the Carnegie ranking system, [studies](#) have shown that R2 institutions are also better equipped to serve their communities through a variety of in-demand graduate programs. They have also shown an increased ability to serve and enroll diverse cohorts of students from a variety of financial backgrounds and to attract top faculty to educate them. In short, R2 designation brings benefits to students, faculty, the local community, and the institution as a whole.



Increased
Governmental
Funding and Grant
Opportunities



Ease of Recruiting
Top Faculty



Increased Service
of Diverse
Students and Pell
Grant Recipients



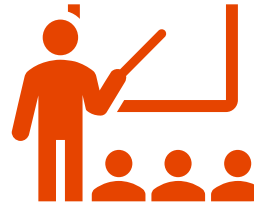
Better Service of
Community Needs



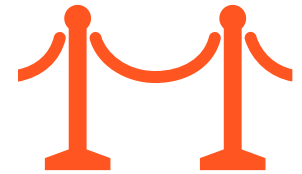
Increased
Reputation and
Rankings

POTENTIAL CHALLENGES OF R2 CLASSIFICATION

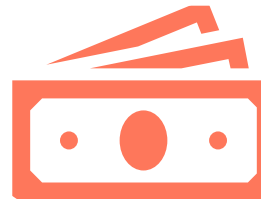
While the benefits of increased Carnegie classification are many, institutions must be careful to avoid several pitfalls. Generally, one of the largest concerns for institutions is that they will begin heavily prioritizing research—and the graduate-level programming that furthers it—over the needs of their undergraduate students. This can lead to a significant loss of what makes an institution unique, whether that be specific curricular or population foci or founding visions and missions. Further, the increased reputation of R2 institutions can lead to a more exclusive institution, keeping some students away—or driving up the costs of attendance. Notably, however, none of these issues are foregone conclusions for increased Carnegie rankings; institutions must simply [work to maintain](#) their character and focus after advancing up the ladder.



Decreased Emphasis on
Teaching and
Undergraduates



Exclusivity May Keep
Students Away



Increasing Cost of
Attendance



Loss of Vision on Unique
Institutional Mission

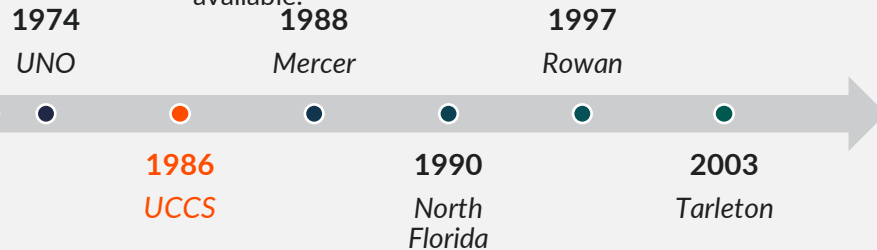
BENCHMARKING TRENDS

GENERAL TRENDS

DATES OF FIRST DOCTORAL PROGRAM



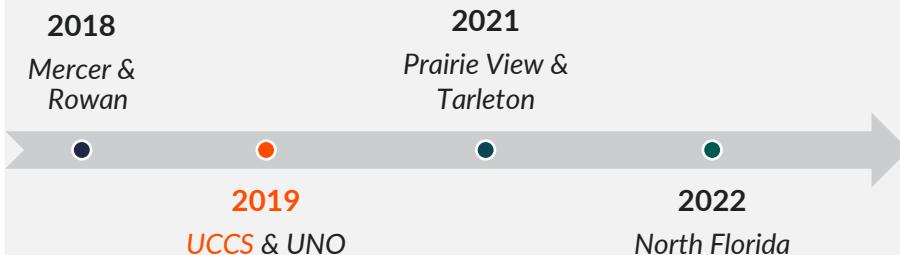
UCCS's offered its first doctoral program ([Electrical Engineering](#)) before all benchmarked peers except UNO. Prairie View's first doctoral program was offered sometime before 2013, but the exact date is not available.



DATES OF R2 DESIGNATION



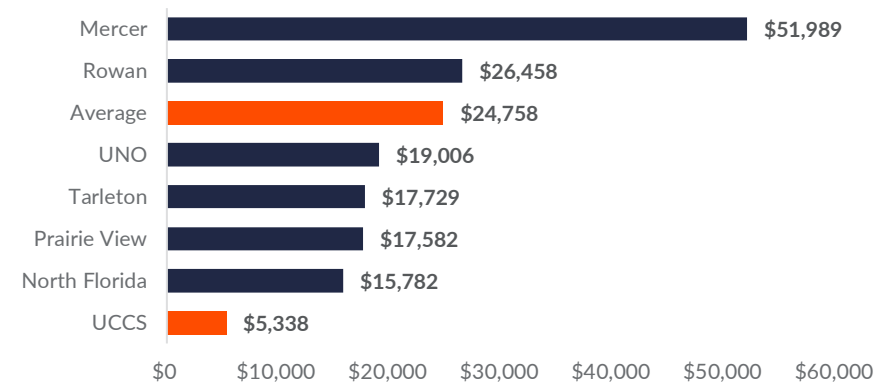
Tarleton's R2 classification came more swiftly than every other benchmarked institution, with only 18 years between its first doctoral program and its R2 designation. UNO took the longest to earn the classification at 45 years, while UCCS took 33 years. On average, benchmarked institutions took around 30 years between their first doctoral program and R2 designation.



RESEARCH EXPENDITURES

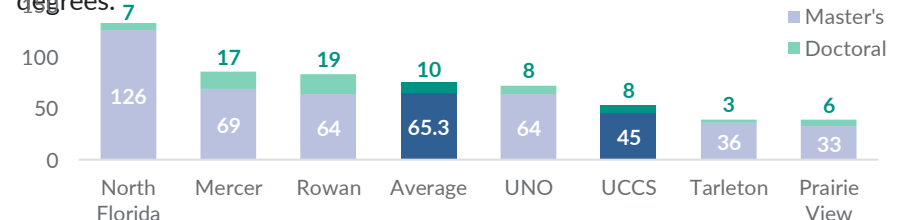
2021 expenditures on research, in thousands of dollars

UCCS spent the least amount of money on research in 2021 compared to every benchmarked peer. On average, institutions spent \$24,758,000 on research, with Mercer spending the most at more than twice that amount—and UCCS spending only slightly more than a fifth of that amount.



GRADUATE PROGRAM OFFERINGS

UCCS offers fewer graduate programs than the average of both master's and doctoral programs, though it beats two competitors at both levels. Rowan offers the most doctoral programs (19) and North Florida the most master's programs (126). PhD programs are the most common type of doctorate among peers, followed by medical and education-related degrees.



INSTITUTIONAL MESSAGING AROUND R2

ANALYSIS

While institutions rarely discuss specific plans for implementing R2 status university-wide, most do heavily emphasize the benefits that R2 brings for students, faculty, and the broader community.

SPOTLIGHT: ROWAN UNIVERSITY

After attaining R2 classification in 2018, Rowan University continued to heavily invest in research and other practices that would make it a major player in national education. A report from 2023 highlights some of the ways that Rowan has followed up on its R2 designation, outlined below.

- Rowan pursued partnerships with two local community colleges to help ensure undergraduate study remained affordable for its students

Community College Partnerships



- Rowan invested in its immediate surroundings to attract new businesses, boost revenue, and create new opportunities for partnerships

Private-Public Partnerships



- Rowan anticipates hiring 50 new research faculty by 2033 to expand its capacity as a research center and further its R2 reputation

New Faculty



- Rowan boosted its investments in its medical campus and facilities, integrating local institutions into its system to expand the number of medical programs it offers

Expanded Medical Offerings



- Rowan is building new facilities to house its science programs, biomedical engineering, and a new veterinary school. It has also launched a new School of Innovation and Entrepreneurship.

New Facilities and Programs



“ Mercer has always had a good reputation for our undergraduate students matriculating to graduate schools across the nation...Being at the R2 level allows even easier access for those students in that they've received that personalized undergraduate experience that they can't get at other schools and it's happening at a national research university...R2 status also serves as a recruiting tool for professors, sending a message to prospective faculty members that You'll be able to accomplish all you want to accomplish, and you'll be competitive for high-level grants...”

- [Mercer University](#)

MAJOR THEMES IN MESSAGING



Definitions of Carnegie Classification



Total Research Expenditures and Doctoral Graduates



Emphasis on Expanded Research Capacity through R2



Maintenance of Teaching Excellence



Impact on USNWR Rankings



Occasional Discussion of Future Plans (New Facilities, Increased Programming, Grant Pursuit, etc.)

BENCHMARKING TABLES

PROGRAM BENCHMARKING

Benchmarked institutions are found throughout the nation. Institutions were selected based on the recency of attaining R2 Carnegie designation, the availability of useful data, and the institution's similarity to UCCS (as possible).

Institution	R2 Attainment Year	Year First Doctoral Program Launched	# of Master's Programs	# of Doctoral Programs	All Graduate CAGR (2018-2022)	\$\$\$ Spent on Research (2021)	R2-Related Initiatives or Messaging
Tarleton State University	2021	2003 (Education Leadership EdD)	36	2 PhD 1 EdD	10.8 %* (20.6% Doctoral)	\$17,729,000	<ul style="list-style-type: none"> Tarleton is using its R2 designation as a springboard for more research initiatives, launching new PhD programs and seeking to bring their research capacity into the broader community. Tarleton has incorporated its R2 Designation into fundraising drives "Our new status as a Carnegie R2 institution endorses what we already know — that we are a dynamic research university with distinguished professors and exceptional student researchers dedicated to advancing life-changing breakthroughs."
University of North Florida	2022	1990 (Doctor of Education)	126	2 EdD 1 DCN 3 DNP 1 DPT	8.1%* (11.5% Doctoral)	\$15,782,000	<ul style="list-style-type: none"> UNF published an interview with its provost of faculty and research to lay out what the Carnegie system is, why R2 designation matters, and what value it contributes to the institution Emphasizes the significance of UNF's research plans that led to the designation, especially the budget for research "The R2 designation gives us a standing in the research community. In addition, some of the other true ranking systems, such as U.S. News & World Report, in their own systems, reference where the universities fall in the Carnegie Classification." Also highlights that increased research capacity and designation help boost the "success and diversification and vibrancy of a particular metropolitan area"
University of Nebraska Omaha	2019	1974 (PhD in Psychology, in cooperation with the University of Nebraska Lincoln)	64	7 PhD 1 EDD	-0.5%* (-0.6% Doctoral)	\$19,006,000	<ul style="list-style-type: none"> Notably, UNO has not made much of its R2 designation, embedding the only mention of its status halfway down its "The UNO Advantage" webpage, noting only that the designation was earned "for our specialized doctoral programs and comprehensive range of master's degrees and certificates," though the designation may be connected to UNO's significant national research dollar acquisitions

Source: Institutional Websites (see embedded hyperlinks)

* Data drawn from IPEDS.

PROGRAM BENCHMARKING

Institution	R2 Attainment Year	Year First Graduate Program Launched	# of Master's Programs	# of PhD Programs	All Graduate CAGR (2018-2022)**	\$\$\$ Spent on Research (2021)	R2-Related Initiatives or Messaging
Mercer University	2018	1988 (PhD in Pharmacy)	69*	8 PhD 1 MD 1 DMin 1 DNP 1 PharmD 1 DPT 1 PsyD 2 DrPH 1 JD*	2.4% (-2.6% Doctoral)	\$51,989,000	<ul style="list-style-type: none"> A newsletter published three years after the elevation explains what R2 designation means for various Mercer populations and explains how the designation was earned and the value it entails for research output Emphasizes that the classifications “exist for ‘research and policy setting purposes,’” impact USNWR rankings, and “eligibility for particular types of state and federal funding and admission to certain research consortiums and organizations” Highlights that it will help undergraduate students succeed post-graduation as the increased reputation of Mercer will help them “matriculate to graduate schools across the nation,” and that it will not sacrifice its commitment to strong undergraduate programming and research opportunities It will help recruit professors as it will allow them “to accomplish all you want to accomplish, and you’ll be competitive for high-level grants”
Prairie View A&M University	2021	Before 2013	33	4 PhD 1 DBA 1 DNP	-7.3% (12.7% Doctoral)	\$17,582,000	<ul style="list-style-type: none"> PVAMU emphasizes its unique status as one of only 10 HBCUs to earn R2 designation, highlighting that the classification “represents excellence in teaching, research and innovation in institutions of higher education across the nation” Specific colleges within the university, such as the College of Engineering, have written about how the designation specifically impacts them, emphasizing that it accounted for roughly 1/3 of all doctoral degrees and a large share of research dollars that led to the designation. It further notes that R2 designation will “allow us to acquire a wide breadth of resources to facilitate scholarly activities and recruit top faculty and students,” increasing their ability to significant research
Rowan University	2018	1997 (Educational Leadership EdD)	64	14 PhD 4 EdD 1 DO	7.5% (7.6% Doctoral)	\$26,458,000	<ul style="list-style-type: none"> Rowan has risen swiftly through the Carnegie ranks, with its announcement release noting that it earned R3 designation only a year before it earned R2 designation, with significant research contributions, new buildings, and new doctoral programming a major factor in its rise. Earlier this year, Rowan published a new report outlining its significant increase in standing and growth since its R2 designation, highlighting how swiftly Rowan has grown (“the nation’s third fastest-growing public research university”), its increasing reputation, its unique partnerships to increase bachelor degree affordability while also boosting research capacity, major new building projects and facilities, expanded program offerings, increased grant resources, and new faculty hiring plans




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