



UNIVERSITY OF TEXAS RIO GRANDE VALLEY

RESEARCH OPPORTUNITY AND INFRASTRUCTURE ASSESSMENT

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EXECUTIVE SUMMARY



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ENGAGEMENT OVERVIEW

The University of Texas Rio Grande Valley (UTRGV) engaged Huron Consulting Group (Huron) to conduct an assessment of its current research investments and research administration infrastructure to identify areas for enhancement and optimization. Each of these three components must be developed collaboratively and cohesively in order to successfully achieve growth goals.



Programmatic

- Identify programmatic focus areas for significant growth and high-yield return on investment
- Identify best practices to increase likelihood of securing externally-funded grants and converting sponsored research into industry and commercial partnerships



Infrastructure

- Enhance organizational structure, roles & responsibilities, and workflows
- Develop recommendations to optimize infrastructure related to compliance, efficiency, and customer service



Financial

- Prepare a financial model and related analysis of the current financial performance of the research enterprise
- Develop a financial model showing the year-over-year sponsored research growth and institutional investment required to meet UTRGV's research targets.

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APPROACH AND METHODOLOGY

Huron conducted the following tasks to assess UTRGV's current state and make recommendations to achieve the desired future state:



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RESEARCH GROWTH GOALS

UTRGV's leadership has set a goal for the institution to achieve \$100M in research.

Huron's assessment of UTRGV's programmatic, infrastructure, and financial structures focused on recommendations that allow UTRGV to achieve this goal progressively across three stages, each with a different definition of \$100M in research:

Stage 1: \$100M in R&D Expenditures

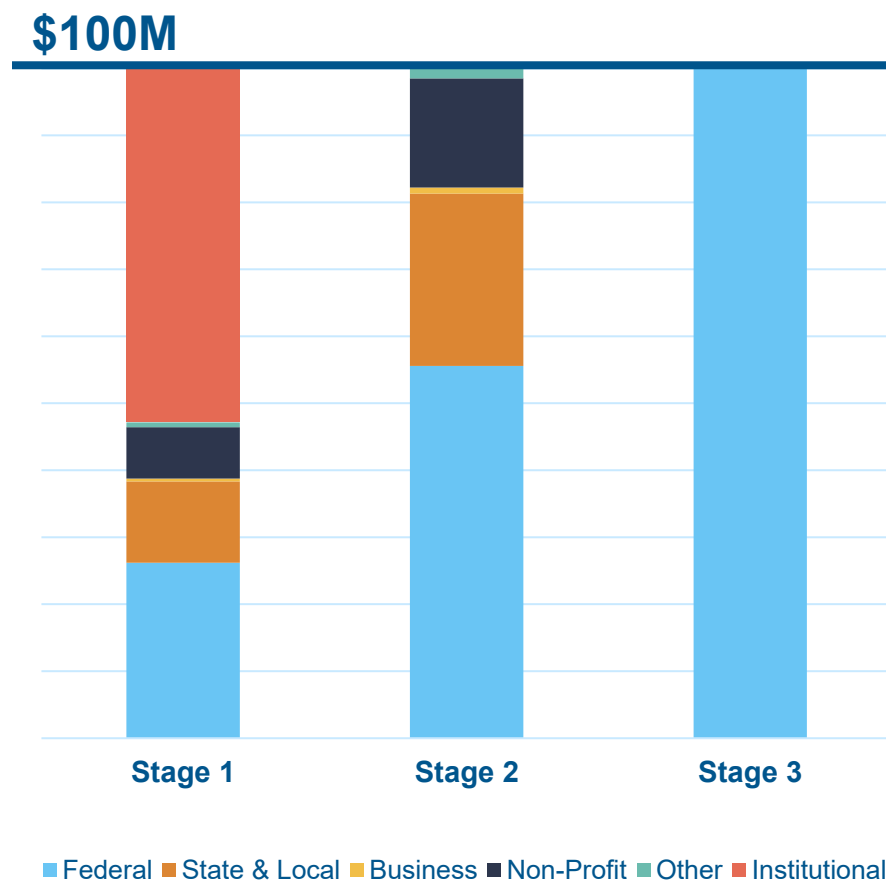
- Includes institutionally-funded expenditures aligned with the National Science Foundation (NSF) HERD Survey definitions
- Excludes non-research sponsored programs

Stage 2: \$100M in Externally-Funded R&D Expenditures

- Excludes institutionally-funded expenditures

Stage 3: \$100M in Federally-Funded R&D Expenditures

- Includes only federally-funded research programs



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PILLARS OF LEADING RESEARCH ENTERPRISES

Through interviews and data analysis, Huron identified four overarching pillars that categorize the opportunities to elevate UTRGV's research enterprise to achieve the institution's goals.



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THEMES AND OPPORTUNITIES

MISSION

UTRGV has focused on building and supporting its instructional mission. UTRGV will need to **enhance the focus on its nascent research mission** to achieve research growth.

Faculty leadership in schools and departments devote varying levels of expertise and attention to research, particularly outside the School of Medicine (SOM).

UTRGV's institutional infrastructure can benefit from research-specific enhancements that will support robust growth.

STRATEGY

UTRGV has identified research, in general, as a strategic priority. To optimize the return on its research, UTRGV should **identify specific research priorities on which to focus its investments.**

UTRGV does not have a research-specific strategic plan that identifies a manageable number of high research priorities that UTRGV wishes to be known for. By doing so, UTRGV can establish unifying direction and goals to drive decision-making and prioritization, including budgetary and financial decisions, to generate research results that are significantly high-yield.

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THEMES AND OPPORTUNITIES

SUPPORT

UTRGV should build on its foundational organizational structure and **develop roles that provide targeted support for its researchers.**

UTRGV's organizational structure is aligned with best practices, but roles can be further aligned to balance operational efficiency and compliance.

Faculty will benefit from dedicated transactional support for pre- and post-award research administration.

Staff will benefit from training and development to build skillsets and expertise across the research lifecycle.

SOPHISTICATION

Processes should be refined to **balance efficiency, compliance, and customer service.** Manual processes should become automated – aligned with research priorities – as UTRGV grows.

Streamlining processes can achieve efficiencies while mitigating risk through quality assurance mechanisms and monitoring.

Many research administration processes require manual intervention and hand-offs. UTRGV will need to consider its investment in automating processes to achieve efficiency and service goals.

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UTRGV-WIDE RESEARCH ENABLEMENT

Substantial expansion of UTRGV's research enterprise requires an equally substantial financial investment and diligent efforts to maximize the return on that investment. UTRGV's success is dependent upon two critical tenets:

1. Growth of UTRGV's research enterprise is reliant on faculty across disciplines that are intentionally focused on research.
2. Increasing external funding allows UTRGV to invest in infrastructure that benefits all researchers.

Huron's recommendations are focused on providing broad benefit to UTRGV researchers through the fostering of a culture of research and innovation across all disciplines and investment in research institution-wide while also focusing a larger portion of its investment on disciplines that have the highest likelihood of increasing external funding.

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GROWTH ENABLEMENT STRATEGIES

- 1 Growth of UTRGV's research enterprise is reliant on faculty with an intentional focus on research. The concept of an "intentional focus" on research is critical for faculty development and financial investments, and **this is not limited to those research areas related to the RPAs.**
- 2 Considering the reality of limited resources, and the demanding needs of UTRGV's instructional mission, UTRGV must be diligent in conveying the intentional concept – especially for current faculty focused on instruction.
- 3 Substantial **expansion of UTRGV's research enterprise requires an equally substantial financial investment** and one objective of the Research Strategic Plan is to **identify those areas that will provide the greatest return on this investment.** Therefore, **a majority of UTRGV's financial investment should be weighted towards enabling the RPAs,** with the overall objective of growing the research enterprise and realizing a strong return on investment.
- 4 **It is expected and necessary that UTRGV maintains and grows research across the institution, including in areas outside of the RPAs.** Therefore, while the RPAs should drive the majority of financial investments, they should not represent the only investment in UTRGV's research.
- 5 Considering the necessary financial investment to achieve this growth, it is imperative for UTRGV to **maximize the financial impact of externally sponsored research and limit financial "leakage"** via cost share, waived indirect cost recovery, and investing research revenue in areas outside of research.

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FINANCIAL AND OPERATIONAL OVERVIEW

Research Goals

- + The financial model assumes UTRGV seeks to achieve its federal funding goal of **\$100M in 15 years**
- + We project UTRGV could reach their research goals in the following stages:
 - Stage 1 goals are projected to be reached in 8 years
 - Stage 2 goals are projected to be reached in 13 years
 - Stage 3 goals are projected to be reached in 15 years

Financial Requirements

- + We estimate the direct Institutional Investment required is \$646M, cumulative from FY21 – FY35. Based on our projections, this includes:
 - Hiring approximately 48 faculty over this period of time
 - Developing new research space at a cost of approximately \$60M
- + We estimate cumulative operating results over FY21 – FY35 at \$950M

Sponsored Funding

- + We estimate that UTRGV should aim to secure \$86.2M from FY21 – FY35 of federal research funding to meet research goals

Duration and investment could materially change based on management decisions

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RESEARCH STRATEGY

Develop a formal Research Strategic Plan for the UTRGV research enterprise that establishes a manageable number of research priority areas (RPAs) for which UTRGV wishes to be known as a national leader. Potential RPAs are identified below and should be vetted through a Research Strategic Planning process.

Existing and Potential Research-Intensive Departments

School of Medicine	College of Sciences	College of Engineering
<ul style="list-style-type: none"> Human Genetics Immunology Neuroscience Psychiatry South Tx. Ctr. of Excellence in Cancer Research 	<ul style="list-style-type: none"> Biology Chemistry Physics & Astronomy SEEMS 	<ul style="list-style-type: none"> Mechanical Engineering Aeronautical Engineering

Purple text indicates Research Growth Departments that have existing strengths.

Green text indicates Research Strength Departments that have existing strengths with a smaller degree of success.

Existing and Potential Research Focus Areas

<ul style="list-style-type: none"> Diabetes and Obesity Liver Disease Alzheimer's Disease Cancer Immunology Opioids and Addiction Infectious Disease HIV / AIDS 	<ul style="list-style-type: none"> Integrative & Organismal Biology Cellular & Molecular Biology Biochemistry Inorganic, Materials, Polymers, & Nanoscience Physical Chemistry Coastal and Marine Ecology Coastal and Marine Biogeochemistry Coastal Resilience Natural Resource Conservation Management Sustainable Ag & Food Systems Biophysics & Nanoscience Atomic, Molecular, & Optical Physics Astronomy & Astrophysics 	<ul style="list-style-type: none"> Aeronautical Engineering Materials Science Cybersecurity Artificial Intelligence
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Purple text indicates existing focus areas aligned to Research Growth Departments.

Green text indicates existing focus areas aligned to Research Strengths Departments.

Yellow text indicates potential focus areas for New Program Development.

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GROWTH STRATEGIES

As vetted and confirmed through the Research Strategic Plan development process, pursue growth using a combination of five major strategies.

PROGRAMMATIC INVESTMENT

FACULTY DEVELOPMENT

Foster development of research faculty through focused time, investment, mentorship, and associated accountability.



FINANCIAL INVESTMENT

Optimize investment in research to achieve a high ROI, systematically evaluating space, core facilities, infrastructure, etc.



EXTERNAL FUNDING OPTIMIZATION

Maximize direct and indirect cost recovery on sponsored fund sources and strategically “invest” in indirect revenue and cost-sharing.



EXTERNAL ENGAGEMENT

INDUSTRY PARTNERSHIP AND COMMERCIALIZATION

Focus resources on new disclosures and ongoing patents with sustainable commercialization potential.



CLINICAL TRIALS

Identify areas of high recruitment potential and focus business development efforts on aligned industry sponsors.

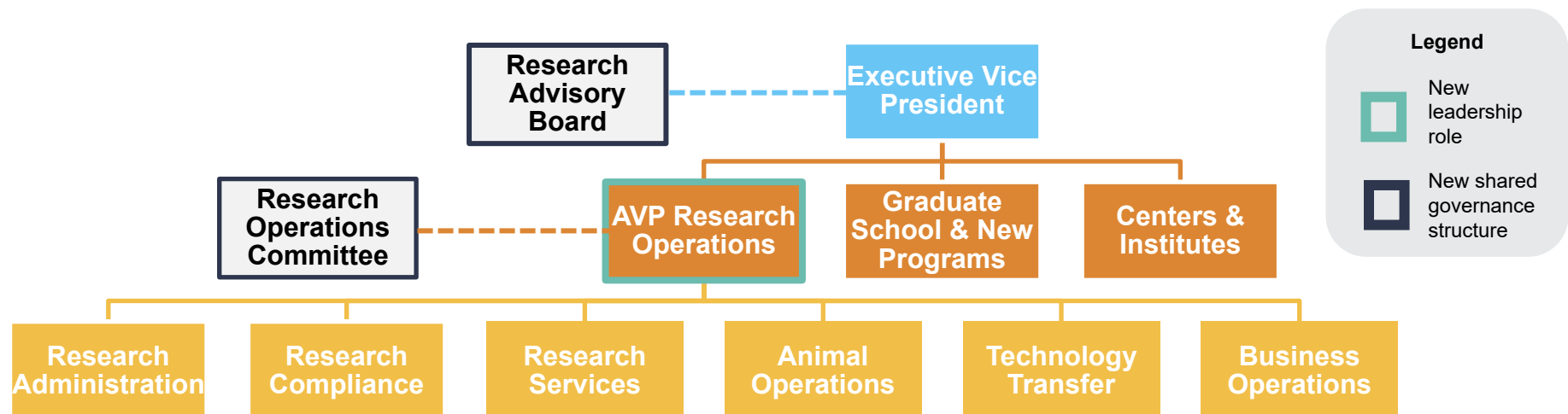


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LEADERSHIP & GOVERNANCE STRUCTURE

Enhance the leadership structure, including roles, individuals and governance mechanisms, to provide the strategic direction, execution leadership and operational support necessary to realize and support UTRGV's planned growth.

- As the scope of this work is focused on research, this illustration depicts the details of the research portion of the EVP's scope of responsibilities. Other functions currently reporting to the EVP, including Libraries, Global Engagement and Sustainability would remain unchanged.
- Detailed recommendations on roles and responsibilities and an accompanying organizational chart for Research Operations are included in Huron's report.



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IMPLEMENTATION NEXT STEPS



Update Leadership and Governance Structures

- Update leadership roles, including the recruitment of the AVP of Research Operations role.
- Establish and convene the Research Advisory Board and Research Operations Committee.



Develop the Research Strategic Plan

- Reaffirm and continue messaging support for UTRGV's research mission.
- After updating the leadership and governance structures, initiate the strategic planning process.
- Evaluate and confirm Research Priority Areas.



Make Independent Operational Enhancements

- Update and publish operational roles and responsibilities aligned with recommendations in this Report.
- Survey schools and departments to identify existing administrative support and train, realign, and/or hire as needed to fill faculty support gaps.
- Educate existing school, department, and administrative leadership on research.
- Evaluate regulatory oversight committee membership.
- Develop and publish a Financial Accountability Policy and associated work tools and reports.
- Evaluate animal per diem rates.

DRAFT: FOR DISCUSSION PURPOSES ONLY



THANK YOU

