

KANSAS STATE UNIVERSITY

RESEARCH GROWTH PLAN: 2023-2030

An internal plan intended to underpin and support the *Next-Gen K-State* strategic plan



As part of the *Next-Gen K-State* strategic plan, we will launch, drive, and report progress on an ambitious multi-year research growth plan.

The specific goals of the plan are to increase annual research expenditures (as reported to the annual NSF HERD Survey, the nationally recognized research expenditures metric for universities) from about **\$200M** annually to \$250M by 2025, and to **\$300M** by 2030. Extramural funding (also referred to as sponsored programs and awards, which includes all competitive grants but excludes internal grants, unrecovered SRO, research equipment and facilities investments, new faculty startup and lab renovations, etc.) is expected to grow at a similar rate. This is shown in Table 1 below. FY 22 has been selected as the baseline year as it is the most recent year for which all data have been collected and reported.

"Five percent per year" Plan for Research Growth at Kansas State University

YEAR	Total Expenditures		Extramural Funding	
	\$ Millions	TOTAL EXPENDITURES TARGETS	\$ Millions	EXTRAMURAL FUNDING ³ TARGETS
FY 22	210		180	
FY 23	221		189	
FY 24	232		198	
FY 25	243	2025 TARGET: \$250M	208	2025 TARGET: \$210M
FY 26	255		219	
FY 27	268		230	
FY 28	281		241	
FY 29	295		253	
FY 30	310	2030 TARGET: \$300M ^{1,2}	266	2030 TARGET: \$270M ²

¹ Achieving this growth depends on both growth in awards and growth in all reported expenditures, as described in the *Research Growth Plan*.

² This represents about a 50% increase over current baseline levels at the start of the plan.

³ Extramural funding includes all new or added award dollars (grants, contracts, cooperative agreements, etc.) received in the fiscal year.

Table 1: Six-year research growth plan/targets

We will achieve these targets by increasing research expenditures (and awards) **5%** per year, year over year, for seven consecutive years. We therefore refer to this as the “five percent plan,” and it is applied to **all colleges/campuses** at the university. It is also referred to as the “fifty percent plan” as we will increase research expenditures by (at least) 50% by 2030.

The **all colleges/campuses** strategy was selected to be fair and equitable in expectations for research growth across all units, regardless of their present level of research activity and extramural funding (i.e., smaller annual growth expectations in terms of absolute dollars for units having smaller baseline expenditures). Thus, the “five percent per year” is relative, conveying the expectation for research growth is the same for all units.

This growth is predicated on faculty growth with focus on those best positioned to attract significant extramural grant funds. This can be achieved by a combination of deans’ (college-level) hiring commitments and multi-college cluster hiring initiatives made possible with support from the university. Both are planned to commence in the coming year.

DIRECTION, OVERSIGHT, ROLES, AND REPORTING

The academic deans have primary responsibility for driving research growth in the colleges or on their campuses. Examples of strategies available to the deans are listed in Appendix A. The provost will work with the deans to establish goals and monitor progress. The Vice President for Research (VPR) will oversee the research growth and supporting programs (described later) and track/report metrics (see Table 2).

METRICS TO TRACK/REPORT RE: RESEARCH OVPR tracks and reports

Metric:	Report out:	To Whom:	KSU-wide	By College
Proposals submitted (\$)	Monthly	First Tuesday	Yes	Yes
Awards (\$)	Monthly	First Tuesday	Yes	Yes
Total research expenditures (\$)	Annually	Pres/Prov/Deans	Yes	Yes
Total res. expend. (\$)/faculty FTE	Annually	Pres/Prov/Deans	Yes	Yes
F&A generated (\$)	Annually	Pres/Prov/Deans	Yes	Yes
Unrecovered F&A (\$)	Annually	Pres/Prov/Deans	Yes	Yes
% T/TT faculty submitting proposals	Annually	Pres/Prov/Deans	Yes	Yes
% T/TT faculty receiving awards	Annually	Pres/Prov/Deans	Yes	Yes

Table 2: Research metrics to be tracked and reported

SUPPORTING/ENABLING PROGRAMS

- Office of Research Development (ORD) services (existing and new)
We have hired two new members of the research development team with plans to add 1-2 more in the next year. A redesigned ORD webpage more clearly and completely describes ORD services and the expertise of individual staff members.
- Supplemental grant development services (external)
We will provide links to external and third-party resources (services as well as informational webinars) to assist with grant development beyond what we provide in ORD.
- SRO return
We will continue the very favorable percentage of indirect (collected SRO) returned to the colleges.
- GRIP (current and future)
The OVPR will continue to identify and develop resources to support GRIP programs in the years ahead. The next GRIP RFP is expected to be announced in fall 2023.
- Sponsored Programs Accounting (SPA)
Sponsored Programs Accounting (SPA) will be moved from the Division of Financial Services to the OVPR to further strengthen the longstanding cooperation and coordination between Pre-Award Services and SPA, and both streamline the oversight and provide better services and management of these units under one reporting structure. Such a one-unit approach to providing research administration services to our faculty is essential for us to meet our research growth goals. This realignment (effective October 1) will further support the development of automated grant management solutions to assist faculty and business staff with sponsored project budget tracking, forecasting, and reporting. Pre-Award Services will be renamed the **Office of Sponsored Programs** to better indicate the broader mission (both pre- and post-awards) of the office.
- Faculty buy-out program (new)
The provost's office, the OVPR and the academic deans have agreed to support a new faculty buy-out program to support a select group of faculty members working on large (e.g., multi-institution or center-level) proposals to federal agencies. This program fund will provide teaching release or an equivalent level of funding for program development (e.g., staff or post-doc) support.
- Major equipment funding (new)
The OVPR will launch a new major equipment competitive grant program (in biomanufacturing and biosciences) making \$1M available to invest in significant research equipment upgrades, investments, or acquisitions. We will also launch a new research facility refresh program that will invest \$500K each year, with a required 1:1 match from the colleges/departments, such that we will be **investing \$1M annually** in core and other shared-use research facilities. These investments can be extended using deferred maintenance funds where applicable.

- Investing in centers and institutes (new)
 - The university (President/provost/VPR) and the colleges (deans) will commit resources to launch (i.e., provide some initial support for) several university-wide centers or institutes. The expectation is that these centers or institutes will be able to attract sustaining funds through grants and contracts.
- GFS grants
 - The OVPR will continue to administer the Global Food Systems (GFS) grants program, which provides multiple grants of up to \$100K to faculty each year.
- FDA and USRG programs
 - The OVPR will continue to administer the Faculty Development Awards (FDA) and University Small Research Grants (USRG) programs which provide support (primarily for faculty in the social sciences, arts, and humanities) for early research, scholarly activity, and creative efforts, as well as to provide international travel support. We will work with the KSU Foundation to increase the total amount of funding we can provide to these important grant programs.
- Startup support for research-active faculty
 - The OVPR will continue to support requests for (up to) 20% of startup packages for research-active faculty in high startup cost fields. As SRO increases and additional investment funds become available, we will move toward a goal of **30%** for startup funds from the OVPR.
- Matching funds
 - The OVPR will provide matching funds for large, multi-institution (i.e., center-level) proposals as required by the sponsor.
- Constellation (faculty cluster hiring program) in *Biomanufacturing*
 - We will announce (in September 2023) a commitment to hiring 12 new research-active faculty in biomanufacturing (and supporting biosciences). This **cluster hiring initiative**, made possible by the new funding for biomanufacturing received from the state, will be led by the Office of the Provost and Office of the VPR.
- Future Constellation in *AI in the Disciplines*
 - Planning is underway for a second cluster hiring initiative in artificial intelligence, with a goal of announcing the launch in 2024 or 2025.

Funding for new supporting programs/investments:

- University
 - Funding from the offices of the central administration (president, provost, VPR, CFO) and the college/campus deans

- **SRO**
Growth in extramurally funded research will result in an increase in SRO. These increases can be directly invested in the most promising existing and future research programs.
- **State**
We will aggressively pursue additional support for research priorities that align with the State’s highest priorities and economic development goals.
- **Federal**
We will aggressively pursue additional federal support for research facilities and programs that align most closely with national, legislative, economic (jobs and workforce training), and agency priorities.
- **KSU Foundation**
The Foundation will include support for research among their fundraising priorities for the university. New resources will be generated that enable (a) the colleges to achieve their research growth targets and (b) the university to support its vision for new centers/institutes, research facilities, and faculty cluster hiring plans.
- **KSIP**
Kansas State Innovation Partners (KSIP) will invest new resources into faculty recruitment, faculty development, and strategic research initiatives with the greatest potential for commercialization and/or economic development.

INCENTIVES

The primary incentive comes in the form of indirect costs (SRO) back to the deans. Our SRO model is very favorable to the colleges (deans) relative to other universities. For example, in our current system, a total of 41.5% of realized SRO on any grant is sent to the colleges (deans) on the Manhattan campus.

The provost, VPR, and CFO are exploring other incentives that could be built into a revised version of the RCM budget model. Examples include (a) variation in the amount of annual subvention directed to each college/campus, and (b) a centrally-funded annual ‘bonus’ in the form of discretionary funding for the dean’s use. Any such additional incentive model would be tied to achieving research growth goals.

HOW WILL RESEARCH GROWTH BE MEASURED?

New sponsored programs and awards are not a stable trend indicator as there can be considerable variation year-to-year, especially with receipt of large grants. Research expenditures represent more of a moving average of research activity and, thus, may be a better indicator. That said, the university’s total research expenditures (HERD figures) include more than just competitively awarded grants. Our annually reported HERD figure also includes (e.g.) university investments in research, state support for research, unrecovered indirect costs, philanthropic support for research, and contract/fee-for-service work that connects with the research enterprise. Therefore, we also will track and report extramural funding (new awards) for the university and by college/campus; see Table 2.

We will measure research growth using a multi-year extramural funding (new awards) trendline tracked and reported for each college/campus by the Office of the Vice President for Research. This is illustrated in Figure 1. Assessments of whether colleges/campuses meet, exceed, or fall short of their research growth goal (5% per year) will be made starting in the third year after the baseline year (i.e., Year 3 after the launch of the Research Growth Plan).

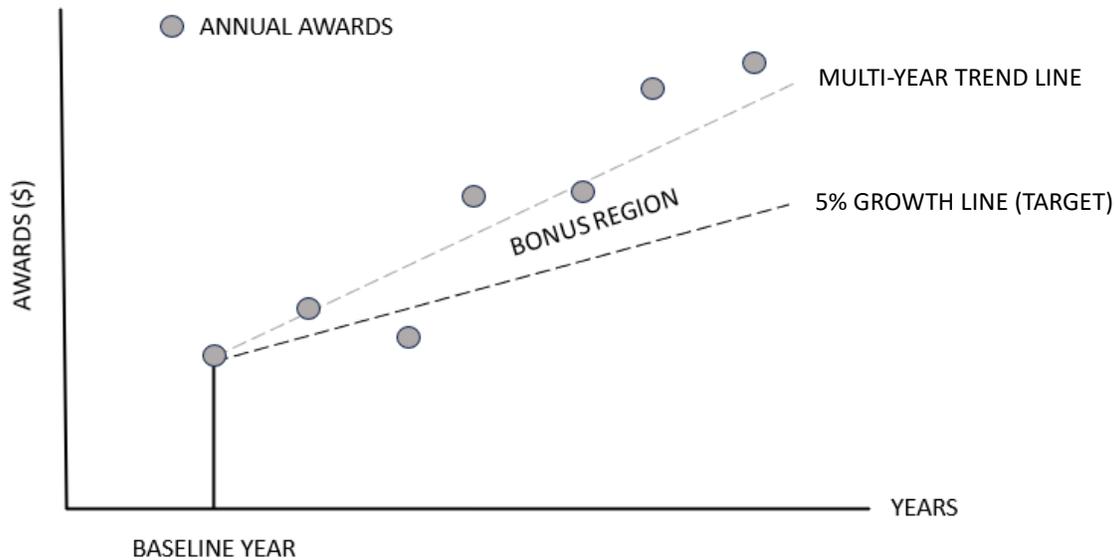


Figure 1. Multi-year award trend line

APPENDIX A: EXAMPLES OF DEANS' STRATEGIES

- **Shifting teaching loads, adjusting teaching and research tenths**

The assignment of “tenths” (a K-State effort allocation and accountability system) varies widely across colleges and departments. There are historical reasons for both the misreporting and the misunderstanding of how these percentages are used. But the “typical” allocation of 60-40-20 (teaching, research, service) does not need to be applied to every T/TT faculty member. There may be circumstances that justify or compel allocation of time (and expectations) that skew more heavily toward research. A research faculty member may have an allocation of 90-10 (research, service). A highly research-active and research-productive faculty member may have an allocation of 70-20-10 (research, teaching, service). Such flexibility allows the dean to distribute expectations as well as workload (e.g., teaching assignments) in order for the college to achieve its research growth goals.
- **Faculty buy-out (pre- and post-award)**

This is another “lever” the deans have to provide time for the most research-active faculty or those leading large research (e.g., multiple institution or center-level) proposals.
- **Direct investment (one-time funds)**

The deans can provide one-time funds to investigators/teams as direct investment to support/facilitate research growth, provide graduate student support, hire research faculty, etc.
- **Dedicated staff support**

The deans can provide dedicated staff support (full or partial) to investigators/teams to support/facilitate research growth.
- **Endowed chairs and professorships**

Endowed faculty positions (new and future) can/should be used to recruit and retain the most productive research-active faculty.
- **Hiring research-only faculty**

For some deans/colleges, it may be desirable/strategic to hire research faculty members, i.e., having only research responsibilities. One approach that has been used by other institutions is for the college/dean to fund the first (e.g.) two years of salary/benefits with the expectation that the faculty member is entirely self-supported by the third year. This is often called a “soft funded” faculty position. A hard-funded position would be fully funded (9-months) by the college/dean, and of course there are a range of funding balances in between.
- **SRO distribution to departments, PIs**

While SRO distribution to the colleges is consistent across the Manhattan campus, there is a wide range of practices by the deans in sharing that returned SRO with the departments, and similarly great variation in practice of sharing the SRO received by the department chairs with the faculty investigators. The deans can decide whether and how to use the SRO that is returned to their colleges to incentivize or otherwise invest in research growth.

- **Seed funds**
The deans can provide seed funds to investigators/teams to facilitate research growth (i.e., to pursue, initiate, or otherwise support elements of the most promising research directions.)
- **Matching funds**
The deans can provide matching funds to support or enhance the likelihood of success of the most promising research proposals.
- **Bridge (gap) funds**
The deans can selectively provide funds to enable faculty investigators to “bridge” periods between awards. This allows for continuity in graduate student/post-doc support and lab operations.
- **Leveraging resources/strategies with other dean(s)**
The deans of multiple colleges can work together to (a) leverage resources, and (b) achieve shared priorities. This can be in the form of faculty hiring, startup packages, support for centers and institutes, staff support for research program management and/or proposal development, equipment purchases, laboratory build-out and staffing, matching funds, etc.

APPENDIX B: BASIS FOR GROWTH TARGETS

Information shared with the Strategic Planning committees:

PEER AND ASPIRANT UNIVERSITIES AND KU (FOR COMPARISON):

Kansas State University	2021 HERD	2021 IPEDS	Ratio
Kansas State University	\$204M	1254	\$163K/FTE
Peer Institution:	2021 HERD	2021 IPEDS	Ratio
Auburn University	\$266M	1497	\$178K/FTE
Iowa State University	\$360M	1485	\$242K/FTE
Oklahoma State University	\$199M	1353	\$147K/FTE
University of Arkansas (<i>not</i> incl. medicine)	\$164M	1355	\$121K/FTE
University of Missouri (incl. medicine)	\$389M	2168	\$179K/FTE
University of Nebraska (<i>not</i> incl. medicine)	\$307M	1591	\$193K/FTE
Aspirant Institution:	2021 HERD	2021 IPEDS	Ratio
Colorado State University	\$447M	1428	\$313K/FTE
Louisiana State University (Baton Rouge)	\$297M	1840	\$161K/FTE
NC State University	\$547M	2033	\$269K/FTE
Oregon State University	\$277M	1404	\$197K/FTE
Purdue University (West Lafayette)	\$679M	2167	\$313K/FTE
University of Georgia	\$494M	2789	\$177K/FTE
Other:	2021 HERD	2021 IPEDS	Ratio
University of Kansas (incl. medicine)	\$386M	2466	\$156K/FTE
AVERAGE:	\$358M	1774	\$201K/FTE

Table 3: Research comparisons for peer and aspirant institutions identified in the strategic planning process