Using the median

in industry as demonstrated by the Math and Physics degree holders who do go off to work

khM #

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- o According to KSdegree stats, physics majors from Kansas have a 60% rate employed the region (<a href="https://ksdegreestats.org/ProspectusController?app=compare">https://ksdegreestats.org/ProspectusController?app=compare</a>).
- o The American Physical Society lists the top 8 companies in Kansas that hire physics BS degrees and over 250 other companies with very good salaries that do so as well. The list below is only a portion of the employers who hired recent physics bachelors into technical positions (https://www.aip.org/statistics/kansas).

BHC Rhodes
Black & Veatch
Cargill
Cerner
CPR Corporation
EN Engineering
Kasa Companies Inc.
NIC, Inc.

o Some of our programs are pipelines to graduate school in disciplines or sub-specialties that are not available in KS, but which KS needs. When a student leaves KS on a fully-funded PhD program in another state for 7 years, this is a great success *that is incorrectly reported* as a failure from the labor-data perspective. This is common for majors in service programs.

Many programs are cost effective (pay for themselves or generate revenue) even with low majors and headcount. For example, from 2013-2021, Physics taught an average of about 8000 credit hours per year at the undergraduate level, 90% of which was required for degree completion of other majors. Conservatively estimating that revenue, based on in-state tuition at U ~\$3M in grant funding just for 2021. The total salary of the department is paid just by the overhead from those grants. It makes no sense to label

The issue of duplication, as the Regents have acknowledged as recently as January 18, 2022, is really a non-starter. Not every campus environment is right for every student. Campus culture, class size, proximity to family support, and other factors make each university unique. Many students will not take a program elsewhere as the location of the university and the ability to live at home is one important reason student attend. Geography matters. These students will

game. Some programs like history and philosophy and English ought to be duplicated at every university because they are, as Regent Kiblinger said, p \times \times kinds of program may be resource-intensive, or too specialized to duplicate, e.g. Veterinary Medicine and J.D. programs. We can certainly work to distinguish program emphases within CIP codes.

There are many efficiencies not captured in this report that should be applauded, even if they appear to compromise the metrics used in the rpk report.

o Transfer/streamlined programs: 2+2 and 2+3 programs like LEAD, affiliations like WSU/WSU Tech

o Interdisciplinary programs, cross-listed courses, team-taught courses

Program metrics should fit the program type. Here is an example of a framework that might help Regents understand the various ways we structure our programs to efficiently serve distinct aspects of our mission.

- <u>Direct workforce pipeline</u>: Some programs are direct pipelines to a particular job profile, for example, teacher education, engineering, social work, accounting, and nursing programs.
- o <u>Service programs</u>: These majors are well-suited to preparing students for exist yet, work that necessarily requires post-graduate training, positions that primarily require these fungible skills, and for responsible participation in the community.

<u>Essential fungible knowledge/skills</u>: Some programs focus on developing high demand fungible skills that everyone needs in a thriving community with healthy, productive workplaces. In addition to the workforce preparation described above, these programs support degree completion and job-readiness through general education, e.g. humanities, arts and sciences.

<u>Gateway programs</u>: Some programs like physics and math develop technical skills that are necessary stepping stones to a wide variety of professions, e.g. engineering, health care, and law.

<u>Example</u>: BS degrees in Math and Physics are a necessary stepping stone for MS students in those areas, and the BS courses required to maintain these BS programs are largely *the same courses* required for engineering accreditation and other necessary university functions.

Recruitment appeal to prospective students

- o Programs that validate and support DEI and NISS
- o Programs that make college affordable through paid applied learning opportunities OAT/OER and other cost-lowering initiatives
- 0

community needs

Minors (A minor like sign language may not have a high enrollment but elimination would be a disaster for schools and social services because the state would not produce enough translators.)

Badges

Certificates

Efficiency through interdisciplinary curriculum planning

- o Cross-listing courses
- Team teaching courses
- Affiliations

## Efficiency in faculty utilization

o Course releases for faculty research

Research that elevates our profile

Research that brings in grant funding

Research that advances knowledge and skills we share with students Research in which students participate as part of their own education

o Course releasees for faculty service

Chairs and Coordinators recruit, advise, and mentor students; develop curriculum; recruit new faculty, and serve a host of other essential functions, at a fraction of the cost of an Administrative position.

## Decisionmaking Considerations in Program Review

Punitive approaches to program review are counterproductive, e.g. labeling large numbers of

Regents are responsible to the Legislature and taxpayers, as are we. Maintaining a healthy system and healthy universities in the long term, as state governance requires, often involves

here. The rpk report pits us against each other by design.

In considering whether a program should be