TO: Tom Boyd, Interim Provost FROM: Faculty Senate DATE: 11 April 2017 SUBJECT: Productivity/Workloads Proposals

1 Introduction and Summary

The Senate writes to express its serious concerns about the proposed new "productivity guidelines"; indeed, their implementation would be counter-productive, assuming the goal is to advance our stated Mission: *Education and research in engineering and science*.

In order to justify this conclusion, we give a chronological account, reviewing how the productivity/workload issue has developed: the Research Task Force and its Report (January 2016), the Senate response (March 2016), the Campus Conference (August 2016), and the Provost's presentation to Senate (January 2017). Then a variety of questions and concerns are raised.

In the last section of this document, a short list of recommendations is given. We believe these could lead to transparent and equitable productivity/workload guidelines.

2 Background: Research Task Force

In May 2015, the VPRTT established the *Research Task Force* (RTF) to consider the following question:

What are the specific qualities defining a 'premier institution' in research, and how can Mines more effectively utilize its resources (capital and human) to achieve the 'premier' status?

The RTF consisted of five tenured professors appointed by the Deans, and two Associate Vice Presidents for Research. The RTF issued its report in January 2016; it is available here: http://research.mines.edu/UserFiles/File/research/task-force-report.pdf. It contains the following:

Work Load Initiative

Mines spends significant funds each year on research through 40% faculty "release" time. Is Mines being strategic with these expenditures? Also, unfair workload hurts faculty morale on campus and needs to be addressed. The following list outlines areas to address in order to continue to attract and retain the best and brightest faculty.

- 1. Mines administration should develop a new faculty workload model for Mines T/TT faculty.
- 2. Mines should adopt a culture where teaching is valued. For example, Mines currently has a way for faculty to "buy out of teaching" (via research funds); we recommend that Mines provide a way for faculty to "buy out of research" (via increased teaching load).

3. All Mines T/TT faculty members should be required to create a Google Scholar profile. We recommend Google Scholar because this site is the easiest to maintain (i.e., the site updates automatically once the profile is created). In addition, all Mines research active faculty should have their own websites to further outreach the broader community and be a portal for recruiting graduate students.

Evidently, the input from the small group of faculty comprising the RTF had a big impact on the administration. As stated by Tom Boyd in his presentation to Senate in January 2017 [emphasis added]:

Spring and Summer, 2015. Lack of consistency in research and SCH [Student Credit Hours] productivity identified as potential issue by **faculty-led** Research Task Force.

3 Senate Response: March 2016

Senate responded last year with a four-page *Faculty Workloads Memo*; it is available from the Senate website http://facultysenate.mines.edu/FAS-Faculty-Documents. The *Memo* is supportive and constructive. It starts with

The Senate understands you are deliberating about faculty workload policies ... As we understand it, the goal of this exercise is to encourage, facilitate and reward research productivity. We support this goal.

It ends with

In short, we recognize the value of engaging in this conversation about workloads. We agree that some actions need to be taken. Our biggest hope is that throughout this process we be mindful of those things that make Mines special and distinct from many of our peers....

In between, there are comments and suggestions, organized under the following headings:

- Enumerate how revised workload assignments will result in better outcomes
- Emphasize positive incentives
- Take a holistic approach that syncs the workload policy with new P&T guidelines and FDRs
- Be attentive to language and policies that may appear to denigrate other aspects of the faculty mission such as teaching and service
- Create pathways that facilitate "course correction"
- Empower our leadership
- Recognize broad standards of impact
- Acknowledge disciplinary diversity
- Incentivize excellence in teaching as well as research
- Recognize that there are many ways faculty workload provides for a healthy financial environment

- Utilize the Faculty Handbook
- Include institutional service in the workload formulation

Unfortunately, the administration never responded to the Senate *Memo*, and it does not seem to have taken into account the Senate's concerns expressed one year ago.

4 Campus Conference: August 2016

During the Spring and Summer, the Provost, Deans and Department Heads developed "revised productivity guidelines". These were presented at the Campus Conference in August 2016. This was done by Tom Boyd and Kirsten Volpi at a session entitled *Achieving our mission: Aligning productivity, rewards, and resources.* The slides are available here https://inside.mines.edu/ACAD-Faculty-Conference.

By this time, it has become clear that the Senate's urging to "Take a holistic approach that syncs the workload policy with new P&T guidelines and FDRs" has been discarded in favor of a "Four Component Approach":

- Holistic University Design. Speaks to: **Strategic Intent**, programmatic priorities (development, size, resources, support)
- Productivity Guidelines. Speaks to: **Quantity**, resource utilization and deployment, strategic intent (sponsored research, student scholarship, curriculum delivery)
- Promotion & Tenure Expectations. Speaks to: **Quality**, faculty incentives, strategic intent (faculty scholarship, curriculum development and delivery, institutional and professional service)
- Budget Model. Speaks to: **Resource allocation**, programmatic incentives, strategic intent (align resource deployment, expand resource base, drive program development)

This "Approach" may be convenient from an administrative point of view but it is counter to the first "Component": universities are, by their very nature, holistic. It is also noteworthy that the word "workload" has vanished.

As to the second component, a "Productivity Model" was presented at the Campus Conference (Table 1). It takes just two numbers into account and outputs your "Instructional Load Target": most faculty refer to it as the **Workload Matrix**.

5 Provost's presentation to Senate: January 2017

At the Senate meeting, Tom Boyd reiterated the "Four Component Approach" and he presented a revised Workload Matrix (with lower numbers, except for tenure-track faculty with over two years in position); see Table 2.

The Provost also showed a slide headed "Faculty Productivity Guidelines – Intent":

- Define transparent, equitable, and sustainable expectations for faculty
- Recognize activities that build institutional reputation

- faculty engagement in quality instruction

Table 1: The Workload Matrix in August 2016. "Productivity Model". Instructional Load Target (SCH per Academic Year)

Tenured Faculty						
Annual	Thesis and Dissertation Advisees					
Research	(as primary advisor)					
Expenditures	≤ 1	2-3	4-5	> 5		
< \$25k	720	660	600	540		
\$25k-\$100k	675	540	440	440		
\$100k-\$200k	630	500	360	340		
\$200k-\$400k	585	460	330	240		
> \$400k	540	420	300	180		
Tenure-Track I	180					
Tenure-Track I	240					
Teaching Facul	840					

- PhD enrollment and scholarly activities

- externally sponsored research
- Provide Provost and Deans mechanism to manage unit-level expectations
- Provide DHs a tool to better manage departmental resources
- Guide analysis and resourcing for University Design process

6 Comments and Questions

6.1 Intent

Let us start with the intent of all this. The main focus is on the tenured faculty. Tenuretrack faculty do not need any more pressure: they should know what they have to do to get tenure. Teaching faculty have fixed-term contracts: they can already be fired if their teaching/service is deemed inadequate.

Undoubtedly, there are tenured faculty who do not pull their weight. Apparently, some DHs are not willing to deal effectively with such under-performing individuals: they need a new "tool to better manage departmental resources".

What does the administration want tenured faculty to do? Many activities are valuable in every university. If there is to be some kind of productivity/workload proposal, it should take account of everything that is deemed valuable so as to advance the mission of Mines. This should include all aspects of scholarship, teaching and service, weighted in some agreed way. Using any version of the proposed Workload Matrix is just too simple: it cannot encourage all the desired activities and nurture the varied talents of the Mines faculty. In addition, it is a one-size-fits-all approach: there is no attempt to determine what is reasonable for each discipline.

Although the administration believes the Workload Matrix will improve both productivity and equity, faculty members are unconvinced, as the following two responses from the

Table 2: The Workload Matrix in January 2017. "Proposed Productivity Guidelines". Instructional Load Target (SCH per Academic Year)

Tenured Faculty						
Annual	Thesis and Dissertation Advisees					
Research	(as primary advisor)					
Expenditures	≤ 1	2-3	4-5	> 5		
< \$25k	630	525	472	420		
\$25k-\$100k	525	472	367	315		
\$100k-\$200k	472	367	315	262		
\$200k-\$400k	420	315	262	210		
> \$400k	315	262	210	157		
Tenure-Track I	157					
Tenure-Track l	262					
Teaching Facul	720					

recent Faculty Campus Climate Survey show.

• The development of workload and productivity metrics will improve quality and productivity of teaching and scholarship:

Somewhat/strongly disagree: 45%

Somewhat/strongly agree: 26%

• The development of workload and productivity metrics will improve equity on campus: Somewhat/strongly disagree: 38% Somewhat/strongly agree: 36%

6.2 Scholarship and service

The proposed "Productivity Guidelines" do not include publications or service. The argument that publications are solely an indication of quality is not right: full professors do not come up for promotion and so the quality or quantity of their scholarly output appears to be of no consequence to the administration.

Exactly the same could be said about professional service, even though a stated intent is to "Recognize activities that build institutional reputation."

Faculty members are expected to serve on thesis committees: this is real work but where are the incentives?

6.3 Teaching

Solely using student credit hours instead of classes/sections taught is questionable. Enrollment is often outside a faculty member's control, so this raises the issue of whether faculty should be punished or rewarded for low or high numbers. Doing either seems absurd since with non-required courses, students often take whatever fits their schedule. Why not simply impose minimum enrollment requirements for all courses and also have each department impose clear guidelines on how many classes faculty must teach? It is unclear whether we should strive to teach large classes or small classes. The Workload Matrix encourages the former, but the Provost has stated that he wants to limit class size. (The previous Provost encouraged departments to teach *more* large sections.) The Workload Matrix does not distinguish between teaching one section with 100 students and four sections with 25 students in each: we all know that the work involved is not directly proportional to the number of students in the class.

It is clear that DHs should not interpret the Workload Matrix literally (no one will fit exactly), but some DHs will use it assiduously and others will not.

We do agree that department budgets should in part be related to these quantities (SCH, \$s, graduate students), but applying it to individual faculty is not going to be productive.

Finally, the proposed "Productivity Guidelines" give the clear impression that teaching is a punishment – this is dangerous at Mines where undergraduate teaching, especially, is our primary income generator. Trying to spin this as "a way for faculty to 'buy out of research' (via increased teaching load)" is disingenuous.

6.4 Faculty evaluations

The administration has not clarified the relationship between the Workload Matrix and faculty evaluations. Will the Workload Matrix be a major part of faculty evaluations, with emphasis on SCH and research dollars, mostly to the exclusion of other factors? If so, this would disincentivize the innovations that Mines wishes to incentivize.

6.5 Promotion & Tenure

How is the Workload Matrix aligned with the stated expectations for P&T? We do not see any evidence of such alignment. It is essential that any productivity/workload model encourage what is expected to be seen in successful promotion applications. Inevitably, this will require discipline-specific models. It also implies that productivity/workload models should be specified in public documents.

In conclusion, the proposed new "Productivity Guidelines" are provoking significant concerns among the faculty: the questions and concerns outlined above have not been addressed adequately. Therefore we propose a short list of recommendations in the next section.

7 Recommendations

- 1. Deans and Department Heads should work with their departments to develop productivity/workload guidelines that are appropriate for each discipline, noting that programs vary widely in their enrollments.
- 2. Teaching should primarily be quantified by number of classes along with appropriate expectations for class sizes.

- 3. Any measure of research should include publications (and quality of publications).
- 4. Productivity/workload guidelines must be aligned with Promotion and Tenure expectations.
- 5. Productivity/workload models should be holistic and include all of the components that make a university successful. A committee should be formed to clarify what these components should be at Mines, and how they could be weighted.