

Regina Economics Department Academic Review

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Review Team

External Reviewers

- Livio Di Matteo, Professor, Department of Economics, Lakehead University
- Frances Woolley, Professor, Department of Economics, Carleton University (Chair of Review Committee).

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Executive Summary

The University of Regina's Department of Economics provides quality economics education at the undergraduate level, engages in economics research that contributes to the University's strategic plan, and plays an important role in the regional economy and community. The Department's innovative approach to undergraduate programming – what we term here the “Regina model” – has allowed it to attract impressive numbers of students, and make a strong financial contribution to the university, while providing students with a high quality educational experience. Through faculty renewal and strong leadership, the research profile of the Department is growing. The Department does, however, face a number of challenges as it attempts to achieve multiple goals with limited resources.

The first set of challenges revolves around student preparation, progression and completion: although material is being delivered in an engaging way, and at an appropriate level, many students are struggling to complete the program in a timely fashion, with the transition from first- and second-year to upper year courses, and with a lack of adequate preparation for the program. In this report we recommend a number of ways to improve student outcomes, including enhanced academic advising and tighter pre-requisite structures.

The second challenge the Department faces is maintaining the current upwards trajectory in research output. Here a multi-pronged strategy is needed, and we make a number of recommendations, including expanding opportunities for graduate teaching through collaborative, interdisciplinary programs, and increasing financial, logistical and other support for research-related activities.

The Department of Economics' distinctive teaching and research orientation allows it to make a strong contribution to the University's strategic goals. Implementing the recommendations outlined in this report would make an already strong Department even stronger.

1. Introduction: The University of Regina's Department of Economics in context

The University of Regina's Department of Economics is distinctive in its size, focus on undergraduate teaching, curriculum design, research orientation, and institutional context. In this section we describe the features that make the Department unique, with a view towards providing context for the challenges, opportunities and recommendations outlined in subsequent sections.

The Department of Economics at the University of Regina is medium-to small-sized department in the Canadian context. As of 2018/19, the Department had nine budgeted faculty positions.¹ Given its size, the Department's exclusive focus on undergraduate teaching is relatively unusual. Most undergraduate-only economics departments are smaller than Regina's, for example, Trent University (5 faculty members)², Mount Allison (6) or Brandon University (3). St Francis Xavier University's economics department is the only undergraduate-only unit we could find that is comparable in size to University of Regina's. Most other economics departments that are more similar in size to University of Regina's have graduate programs, such as UNBC (9 faculty members), Lakehead University (6), or UBC Okanagan (11).

The Department's focus on undergraduate teaching, however, has produced impressive results. The Department offers 10 programs at the BA and BSc level and has a total undergraduate course enrollment of approximately 2900 students and just over 200 majors. The course offerings, moreover, are innovative and distinctive. We know of no other economics department in Canada that has changed its first year economics offering to an "Introduction to Economic Issues" course. Most universities offer semester-long courses in principles of microeconomics and principles of macroeconomics course in first year. It is also unusual to offer such a wide range of courses at the second year level *and* make those courses available to students without the economics principles courses. Popular courses in the economics of crime, economics of sports, and economics of beer are particularly noteworthy. The Department has also taken a collaborative and creative approach to designing new majors, working with other units and faculties to develop the new and popular philosophy, politics, and economics major, as well as the B Sc in economics.

Although the Department faces some challenges in delivering and maintaining its undergraduate program, as will be discussed in subsequent sections, our overall impression of the program was very positive. The atmosphere in the Department based on the student feedback we received was very good with students generally happy with their overall experience, and with faculty satisfied with their research and teaching work as well as being quite collegial.

The Department's relatively small size, in combination with its healthy enrolments, allows it to play an important role in fostering the fiscal sustainability of the university. Class sizes have been increasing with the average rising from 46.8 in 2014 and reaching 59.1 students per class in 2018 and are now among the largest classes in the Faculty of Arts. Indeed, it was noted in one conversation with the reviewers

¹ Due to the number of seconded faculty members and their reduced time, and the use of revenues generated through the Centre for Continuing Education (CCE) to fund positions, the actual number of faculty positions varies from the budgeted number. Unfortunately, the data provided to the reviewers did not include numbers on the actual number of research and teaching faculty.

² Faculty counts at other universities were obtained by counting the number of faculty listed on departmental websites.

that the greatest strength of the Department of Economics is its ability to attract large numbers of students and teach them efficiently.

At the same time, the role of the Department in the University does also appear to be torn in several directions. For example, in the Review Teams' meetings, we heard a desire for the Department to be a source of enrollment and revenues, but also for the Department to become more successful in research via grant revenues and scholarly publications.

Our overall impression is that the Department's research profile is comparable to similar departments at other universities. Through research on environmental and energy economics, the Department contributes to the University's strategic focus on sustainability. Faculty members working on topics such as cannabis legalization have been active in the media, advancing the profile and awareness of University of Regina research locally, provincially, and nationally. Successful partnerships with government ministries and foundations demonstrate the Department's commitment to doing research "in and about Saskatchewan for the benefit of Saskatchewan residents."

At the same time, the Department does face some research challenges, as we will discuss in subsequent sections. Some of these challenges are common to most smaller economics departments in Canada, such as low SSHRC success rates, as well as the long publication delays and high rejection rates at many economics journals. Others are more specific to the University of Regina Department of Economics, and stem from the Department's lack of a graduate program, and the absence of senior research-active faculty within the department. (There is only one faculty member who has achieved the rank of (full) professor, and he is currently serving as Dean of the Faculty of Arts.)

Overall, our impression of the Department is that it is well-functioning, productive unit that makes a strong contribution to the University of Regina's strategic goals. At the same time, the role of the Department in the University does also appear to be torn in several directions. An economist might describe it as a case of "too many targets, not enough resource instruments". There are many targets being set for the Department: to be a source of enrollment and efficient revenues with above university average class sizes, but also become more successful in research via grant revenues and scholarly publications, have a successful graduate program, provide practical and applied economics education, prepare students for admission to economics graduate schools, and contribute a high degree of service to the university and community. Yet the department does not have sufficient resources or instruments to achieve all of these targets. Key functions, such as student advising, are centralized within the Faculty of Arts, and are not always fully aligned with the needs of the Department. Given the size of the Department of Economics in terms of full-time faculty and the large size of the student body, there is a high work-load given the conscientious efforts made by faculty to provide attention and maintain a great deal of contact with the students. Multiple competing demands and insufficient resources are, in our view, at the root of the challenges facing the Department, to which we now turn.

2. Challenges and opportunities faced by the unit

After a period of past challenges with respect to enrollment and staffing, the Department is now on a path to sustainable enrollment with international students playing a larger role. The recent foray into graduate education has ended and that will allow the Department to devote more resources to deepening its undergraduate programs or think about innovative and collaborative programs. With recent and projected renewal of faculty there has also been an increase in its research capacity and output. Yet, there are challenges facing the Department with respect to the sustainability of a teaching model that has such a diverse number of programs and program aims, close faculty student interaction and attention, as well as such a diverse body of students with additional requirements in terms of background preparation.

To identify the challenges and opportunities faced by the department, the Review Team considered the self-study document prepared by the department, and also met with students, faculty, and people in key administrative roles. In all of our interviews, as well as in the self-study, the people we spoke to were thoughtful, reflective, and forthcoming, providing us with a comprehensive and complete picture of the challenges and opportunities faced by the unit. These are as follows:

1. **Student preparation.** Concerns were expressed by both faculty and students about the level of preparedness by students with respect to mathematics given the technical focus of modern economics education. Along with concerns about the level of mathematics preparation, economics is experiencing an increasing number of students with more diverse cultural backgrounds who struggle with basic math skills, writing skills and language comprehension. From the students' perspective, the jump in expectations between the accessible, open-access first and second-year courses and the upper-year courses was a major issue.
2. **Student progression, completion and advising.** The self-study report identified timely progression and degree completion (p. 26) as one of the challenges facing the Unit. Students not utilizing academic advising (p. 26) was another issue flagged in the self-study.
3. **Student numbers.** Another potential challenge facing the Department of Economics at the University of Regina in the short to medium term is domestic and local enrollment given that population projections show a decline in the 20-24 age group through to 2024 after which increases are expected. The Economic Honours program, in particular, is undersubscribed. For example, in the 2018 convocating class, there was just one BA Economics honours student, and 6 BSc Economics students (p. 16). Given the absence of a graduate program, an Honours program can be a source of able and motivated Research and Teaching assistants that currently are in short supply. Female participation in Economics is also rather low at 28 percent of majors. The Department relies heavily on international students (pp. 14-15). This can be seen both as a challenge, because it makes the Department vulnerable to enrolment fluctuations, and also an opportunity. The growth of the indigenous demographic is also another opportunity for enrollment and program development and growth at both the graduate and undergraduate levels.
4. **Overloads and course rotations.** With respect to teaching, the Department officially has a 2-2 load but over the last five years, effective loads have often been greater than this as a result of faculty members taking on overloads to meet the robust demand for economics courses. Faculty also appear to be teaching a wide range of courses. Given the need for prep time, this can have some implications for research productivity.

5. **Division over what the role of economics education is.** During our site visit, and in reading the self-study document, the Review Team sensed a division within the department over what the role of economics education is. Is the aim of the economics program preparation for work and therefore practical and applied? Is it preparation for further graduate work in economics with the aim to becoming a professional or academic economist? While in an ideal world one should do both, in reality resources are scarce and choices often have to be made if sustainability of effort and energy is to be maintained.
6. **Research.** The Department is on a strong upwards trajectory in terms of its research productivity, however a number of challenges remain. Several of these were identified in the self-study report.
 - Improving quality and quantity of research output in a high teaching intensity environment with extensive administrative demands (p. 26)
 - Small number of faculty members, making it hard to reach a critical mass of researchers, and creating risks of isolation (p. 26)
 - Capacity for mentorship of junior members (p. 26)
 - Availability of quality research assistants (p. 26)

A number of these challenges, however, can be seen as products of the Department's successes. The lack of student preparation is an inevitable by-product of attracting students from a wide variety of backgrounds into economics. The jump in expectations between lower- and upper-level courses reflects the decision to make first and second year economics courses relevant and engaging. The division over the role of economics education stems, in part, from the department's active engagement with policy and practitioners. In a more traditional department, where faculty members were united on the need to prepare students for graduate work in economics, there would be no such division.

While the self-study document prepared by the Unit did, overall, a good job of identifying the challenges facing the Department, it may have understated its opportunities. The key opportunities identified in the self-study were:

- Increasing demand for graduates with strong quantitative skills (p. 26)
- Increasing interest in the BSc Major in Economics program (p. 27)
- Scope within the Department for developing more online courses (p. 27)
- potential for course offerings in areas of Behavioral Economics, Identity Economics, and Institutional Economics (p. 27)
- Build a more environmental, resource and energy economics focus in our program offerings (p. 27)

During our interviews, the members of the Review Team suggested a number of additional opportunities to members of the Department and the university. These included enhanced research and teaching collaborations with the School of Business and the Johnson Shoyama Graduate School of Public Policy, creating interdisciplinary master's programs in areas such as sustainable energy and financial economics, and creating fast-track pathways for undergraduate students into programs such as the Johnson Shoyama School's Master's in Public Policy program. The initial reaction to these suggestions was favourable, and we expand them in the following sections, where we consider undergraduate teaching and programs, graduate education, and the Department's research environment in more detail.

3. Structure and quality of undergraduate programs and instruction

At universities across Canada, economics is a highly structured degree in terms of core theory and statistics requirements – microeconomics, macroeconomics, statistics, econometrics, mathematical economics and then a series of field electives. In many respects, the University of Regina program follows this standard model. For example, the BA Economics (Honours) requires 60 credit hours (10 full courses), including the standard theory and methods courses and a capstone seminar. The BSc Economics degrees have 72 credit hours of core material and cover the same standard set of courses. In this report, we will call these the “traditional” economics programs.

As noted earlier in this report, however, the University of Regina has a distinctive approach to undergraduate economics education. Students begin their studies by learning how to apply economic concepts to real-world policy issues. The standard principles of economics/intermediate micro/intermediate macro course sequence follows after students have had an opportunity to see economics in action, rather than before. This approach has a number of strengths. Based on our interviews with students and the graduates’ testimonials in the Academic Unit Report, the Regina model of undergraduate education appears to do an excellent job of building students’ understanding of and interest in economic ideas, as well as their communication and critical thinking skills. It draws in a wide range of students, and has facilitated the development of a number of popular interdisciplinary degree programs, such as the BA in Politics, Philosophy and Economics. **Our overall evaluation of the undergraduate program is strongly positive.** The Department does, however, face a number of challenges, and we devote the remainder of this section to outlining the challenges, and discussing ways of addressing them.

The first challenge identified was student preparation. Students face an abrupt transition in terms of level of course difficulty when they move from the first and second-year applied issues courses to the third year intermediate micro, macro and methods courses. Due to the higher mathematics requirements in the BSc program, these students are generally better prepared than those in other streams. However, the level of mathematics preparation outside of the BSc and Honours programs was not as robust.

The Department is taking steps to address the student preparation issue. The Review Team was very impressed with the chair’s initiative to partner with the international student office to offer tutoring sessions geared at reaching international students. We also understand that entry requirements for international students are being raised, which should help alleviate the issue of students lacking basic skills. However, in the view of the Review Team, more needs to be done.

The concern about the level of mathematical preparedness of students in the economics program and the somewhat abrupt transition in degree of technical requirement from 200 to 300 level courses could be addressed, first, by making Math 103 a requirement for all degree options, including, for example, the Philosophy, Politics and Economics program, to ensure preparation for higher level economics courses. However, that would be a rather blunt instrument, and we do not recommend it. Indeed, given that a student could be admitted into the PPE program with no mathematics other than the minimum required to graduate from high school, requiring Math 103 would be a very abrupt change from the status quo.

Instead, our preference is to guide students towards making better choices by ensuring they are better informed. This requires better and more streamlined advising at the Faculty of Arts level. In particular:

R1: There needs to be proactive, effective, and tailored academic advising available to students

Proactive academic advising actively reaches out to students, rather than waiting for students to ask for advising services. Effective advising reaches students, and provides advice in a timely fashion. Tailored advice is customized to each students' goals. For example, with tailored academic advising, students in first and second year economics courses could be encouraged to take more mathematics and computer science courses, to improve their background preparation.

In order to give tailored academic advice, the advising staff need to have a depth of knowledge about each program that goes beyond simply reading what is in the calendar entry. For example, one BSc student reported to us that they were unable to find anyone in the Faculty-level advising office who was able to assist them change their major to economics. The student ended up turning to a faculty member for assistance. We therefore recommend:

R2: Economics be assigned a dedicated academic advisor. The academic advisor should be responsible for reaching out to stakeholders each year, identifying areas of concern, and consulting with respect to what advice should be given to students.

In the view of the Review Team, investing in Department level student advising staff, for example, an undergraduate administrator, would be the ideal solution. This would also be of benefit by freeing up faculty time for research given faculty are spending a great deal of time advising students. In the absence of increased departmental-level staff, a dedicated advisor at the faculty level would be the best alternative.

Better academic advising could also help address challenge 2 identified in the previous section: student progression, completion and advising. The issue of student completion and progression arises, in part, because some students are able to continue with their studies at the University of Regina as long as they have a GPA higher than 60%. However, in order to graduate, students require a minimum GPA in the major of 65%. There does not seem to be at present a system that flags these above 60/below 65 students early on. Consequently, students are unaware that they need to take steps to boost their averages or retake courses in order to complete in a timely fashion. The Review Team requested data on the number of students who fall in this able to continue/unable to graduate 60/65 grade range, but the University was not able to provide it. We were told that a new degree audit system will make it easier to identify these students. In the meantime, however, we reiterate the need for more proactive academic advising.

One way of providing an early warning to students who are unlikely to make the 65% major GPA requirement, as well as addressing the student preparation issue, is to impose tighter prerequisites on key required courses, such as ECON 301 and ECON 307. As is shown in the Appendix, of the 488 students enrolled in ECON 301 over the past 10 years, 113, or 23 percent, had a grade below 60 percent in the prerequisite course, ECON 201. This figure, moreover, excludes students who repeated either ECON 201 or ECON 301, who would be disproportionately likely to get low grades. The reality is that the economics program at the University of Regina, like economics programs at many other Canadian universities, is serving as a landing place for students who would like to study business, but are unable to meet the Faculty of Business requirements. Unfortunately, it appears that some of these students are not able to

cope with economics any better than they were able to cope with business, and are not progressing through the program and graduating in a timely fashion. Therefore, in order to give these students an opportunity to improve their preparation, and to give them an early signal that they need to improve their performance if they hope to complete their program and graduate, we strongly recommend that the department:

R3: Require a minimum grade of C- on all prerequisite courses in the microeconomics / macroeconomics / quantitative methods sequence. So, for example, the pre-requisite for ECON 307 would be ECON 301 with a grade of C- or better, and the pre-requisite for ECON 301 would be ECON 201 with a grade of C- or better.

Tightening prerequisite requirements would inevitably have some negative impact on student numbers, but it is worth making this change to improve graduation rates, time to completion, and student satisfaction.

However, while enrollments have been stable, looking ahead, another potential challenge facing the Department of Economics in Regina in the short to medium term is domestic and local enrollment given that population projections show a decline in the 20-24 age group through to 2024 after which increases are expected (see 3, student numbers, in the Challenges section of this report).

The recent decline has particularly affected the BA Econ with the other programs either stable or growing. The BSc Econ has been particularly impressive in its growth at least in percentage terms since 2010 and there was a sharp increase in the Econ Honours enrollment in 2018 associated with the BA PPE Stream. However, the Economic Honours program is still seen as undersubscribed and there is a desire to boost the size of the Economics Honours program. Given the absence of a graduate program, an Honours program can be a source of able and motivated Research and Teaching assistants that currently are in short supply. Given that female participation in Economics is rather low at 28 percent of majors, initiatives to recruit more female students represent an important area for future growth of enrollment in the Honours program. The growth of the indigenous demographic is also another opportunity for enrollment and program development and growth at both the graduate and undergraduate levels.

Dealing with this medium-term decline is challenging but can be addressed with initiatives to attract international students as well as boost the participation of females in economics education which at 28% in the Economics program. As well, academic advising is key here so as to enable students to take advantage of economics education as well as succeed at it. Thus we recommend that the department:

R4: Consider introducing second-year courses with minimal pre-requisites, similar to the “Economics of Beer” and “Economics of Sport” courses currently offered, but which appeal to other demographic groups in the student body. We would suggest policy type courses such as dealing with the non-profit or volunteering sectors, community and regional economic development, gender, indigenous issues, or economic and social inequality.

However, this recommendation must be tempered against challenge 4 in the previous section: overloads and course rotations. Additional policy courses should not be introduced if they will add unduly to the teaching and preparation burden on faculty. Moreover, as was noted under challenge 5, given division over what the role of economics education is, resources are scarce. Choices have to be made if

sustainability of effort and energy is to be maintained. In the next section we turn to one choice facing department: the desired scope of graduate programming.

4. Graduate programming

The Department's recent foray into graduate education (*Masters in Applied Economics and Policy Analysis* (MAEPA)) ended due to the inability to attract substantial numbers of good candidates. In our view, however, the lack of interest in the program was not a reflection of the quality of the Department of Economics at University of Regina. Rather, the MAEPA failed because "applied economics" is not a well-recognized degree, and the program also experienced strong competition from the long-established public policy degree at the Johnson Shoyama School.

In the view of the Review Team, teaching and training graduate students is a necessary part of research culture as well as grant success. Teaching advanced courses within their area of research help faculty keep on top of the most recent research. Having opportunities for training graduate students is essential to SSHRC success.

A collaborative graduate program would be a way to build on the university's and Department of Economics's research strengths given the resource requirements of a stand-alone graduate program and recent past experience with the MAEPA. Given the department's research strength in natural resources – broadly defined to also include energy, agriculture, climate and environmental studies – a collaborative master's program in sustainable energy, with contributions from units such as economics, public policy, engineering, and business, would be one avenue worth pursuing. The Department also has research strengths in health policy broadly defined, which opens up the possibility of a collaborative master's program in health economics. A joint master's in financial economics program with the Faculty of Business would likely be attractive, particularly to international students. A final possibility would be to draw upon the strengths of economics faculty members in quantitative research, and collaborate with colleagues in fields such as statistics, computer science, business, public policy, and the sciences to develop a collaborative master's program in big data or data analytics. In sum, we recommend that the department:

R5: Work with other units to develop joint graduate programs in areas where the department has research strength and student demand is strong, such as big data, data analytics, sustainable energy, financial economics or health economics.

These initiatives would utilize the department's research strength and also support the university's strategic plan by increasing the number of joint programs. It would also indirectly increase opportunities for Tri-Council funding by providing greater opportunities for attracting and training of graduate students, further supporting the university's strategic plan.

A first step towards developing joint graduate programs may be the development of shorter certificate programs. Thus we recommend that the Department of Economics:

R6: Explore the possibilities of partnering with the business or policy faculties to deliver Executive Education programs.

Executive Education programs are a potential source of revenue for the Department, and could also form the nucleus for future graduate programs.

While new graduate programs are being developed, we recommend that the Department of Economics explore the possibilities of closer linkages with other units. As noted above, graduate training is a key element of SSHRC grant success. One way of providing research-active economics faculty members with an opportunity to supervise master's and PhD students is by affiliating these researchers with other units that already have appropriate graduate programs in place.

R7: Explore the possibility of affiliating research active Department of Economics faculty with the Faculty of Business or the Johnson Shoyama School, and promote exchanges of teaching resources between the units.

In a relatively small unit such as the University of Regina's Department of Economics, it may be hard to sustain a graduate program as well as a thriving undergraduate program. Hence the Department may rationally choose not to pursue expanded graduate programming. However, if engaged and research-active faculty are not given an opportunity to teach advanced courses in their field, they may not stay engaged and research-active. Moreover, given the challenges the undergraduate program faces in terms of student preparation and low numbers in the BSc/honours BA streams, the scope for offering advanced seminars at the undergraduate level is relatively limited. Hence the Review Team recommends that the Department give serious consideration to potential graduate programming options.

4. Scope and significance of research being pursued

The faculty of the Department of Economics at University of Regina conduct research in a wide and diverse set of areas including health economics, development economics, agricultural economics, economics of corruption and tax evasion, behavioural economics, and energy and environmental economics. Over the period 2008 to 2018, a total of 58 refereed journal articles were published by Department members as well as 23 technical reports/working papers, 4 book chapters and 2 books. Moreover, there were 91 conference presentations showing a great deal of engagement with respective academic research communities. There has also been a sustained increase in citation counts as measured by Google Scholar since 2008.

There is substantial research funding that has been garnered though much of it is via sources other than the National Granting Councils with the CIHR being a notable and impressive exception given overall grant success rates. Along with the CIHR, sources include government ministries, foundations and some private money. SSHRC is one area where success has been a challenge, but this is not unexpected. Table A1 breaks down the amount awarded in SSHRC Insight Grants in economics by institution for three competition years, 2015 to 2017 inclusive. The table shows that the funding in the SSHRC Insight Grant program overwhelmingly goes to researchers at large institutions such as UBC, SFU and Queen's. We see no indication of this changing in the near future. Indeed, SSHRC may not be the best venue for economics researchers at Regina to invest their time unless it is via collaborative grant efforts with, for example, community partners, or researchers at other universities. Hence we recommend:

R8: Resources directed at improving Tri-Council grant success rates should be directed to faculty pursuing collaborative research projects both within and external to the university.

Based on PhDs and areas of publication, there appear to be particular departmental strengths in natural resources – broadly defined to also include energy, agriculture, climate and environmental studies, as

well as in health policy. Any efforts of the Department to develop a research focus or specialization in terms of current faculty expertise and future hires may want to consider focusing on these areas though ultimately the department may do best by hiring strong candidates in any field. These are also areas where program links with other programs and faculties such as with the Johnson Shoyama Policy School or the Business Faculty could be explored.

One area that was noted by the reviewers with respect to research culture was the absence of senior level researchers within the Department, as key senior level faculty have gone into administration. While this service is of value to the university, the type of research mentoring and leadership that can be provided to more junior faculty on the road to tenure and promotion seems weakened. Although we were very impressed by the leadership provided by the current chair, the Review Team believed that additional initiatives would enhance the level of mentorship provided. In particular, it does not seem that there is a clear articulation of unit-level standards for tenure and promotion. Thus we recommend:

R9: There needs to be clearer articulation of unit level standards in research and promotion.

The secondment of senior members of the department into administrative positions has created a department with a somewhat lop-sided age structure, making mentoring challenging. There is no easy solution to this situation. Ultimately, the review team notes:

R10: A hire at a senior level may be required to help build the research profile of the Department, and provide leadership to junior faculty.

Some of this leadership and mentorship also requires promotion of research activity and celebration of successes not only within the Department but communicated to the rest of the Faculty of Arts and indeed the university community. Thus we recommend:

R11: The Department start a newsletter which is circulated to current students, alumni and the broader university community and celebrates departmental achievements. There should also be a university and faculty wide initiative to promote economics research and accomplishments. Note of major media contributions should also be included in this type of communication and recognition.

A newsletter would be one way of supporting faculty members in their research success. It would also further the university's objectives of promoting news stories that focus on university successes and profiling University of Regina research successes internally and externally. Finally, it would deliver on the University-level commitment to provide necessary resources to publicize research successes.

Finally, a heavier teaching load combined with what seem to be substantial amounts of informal academic advising, an "open door" policy for students, and other administrative burdens have come together to reduce the time available for research. While research output is good and has increased, it cannot grow and there is even a risk of decline if faculty cannot carve out consistent and stable blocks of time for their research. Research success also requires other faculty supports such as access to data and software for faculty, funds for conference and research travel given Regina's locational cost disadvantages when it comes to travel.

R12: Given the revenue streams generated by the Department of Economics for the University, consideration should be given for investments in course release, conference travel and data resources and statistical research support for faculty in the Department.

If the university is serious about wishing to enhance the research profile of the Department of Economics, it needs to put resources into research supports.

5. Meeting students' learning needs and goals

The student feedback reported in the self-study, as well as the Review Team's meetings with students, demonstrated a very high degree of satisfaction with the education acquired. The testimonials include comments such as:

"a challenging and rewarding experience"

"liked the degree of emphasis that the undergraduate and master's degree programs placed on writing"

"transformative experience"

Productivity enhancing: *"During this time, I learned that I could write papers more than twice as fast as I used to write them because, given the workload, I had no other choice but to write them twice as fast"*

"afforded me the ability to think through problems more critically"

"an open-door policy and the faculty were always able to help"

The list of successful graduates also shows a wide range of career placements in the private and public sector as well as a number of graduates who have gone on to do PhDs in economics.

At the same time, as has already been noted, the Department is serving a wide range of students across a number of different programs, and sometimes it can be challenging to meet the pedagogical needs of different groups of students simultaneously. In particular, in our site visit it seemed to the review team that a tension may be emerging within the department between those who emphasized meeting the needs of students in the traditional economics programs and those more focussed on applied and interdisciplinary studies. Indeed, this is evident in the description of the programs and majors in the Academic Unit Report which states that:

[M]ajors in Economics are designed for students who plan to work as professional economists in the private sector, public sector, or for non-profit organizations. These majors place greater emphasis on core theory and quantitative analysis, with the BSc having more quantitative requirements than the BA. The major in Economics and Society and the combined majors are designed for students who are interested in liberal arts and interdisciplinary approaches to economics, who are preparing for professional schools (e.g. law), or who plan to complete graduate programs in business, public administration, or international relations. Compared to majors in Economics, these majors place more emphasis on policy and applications. The Honours in Economics degrees (both BA and BSc) are designed for students planning on a career as a professional economist or hoping to pursue graduate studies in economics." (Academic Unit Report, p. 9-10)

Essentially the Department is attempting to offer appropriate educational pathways for students with two very different sets of needs. Students who are on track to work as professional economists –the BSc and honours BA students – need a strong quantitative training in order to be adequately prepared for graduate school in economics. If anything the training that they are being offered is not quantitative enough, rather than too quantitative. However, these students are a small minority of the student body. The bulk of students are in programs such as the non-honours track BA and the PPE program. These are good general arts degrees which are more policy oriented and interdisciplinary and which prepare students for options other than the path to becoming a professional economist.

It is not entirely clear how to resolve these tensions. Given the relatively small size of the honours cohort, the department can only offer a limited number of courses tailored to the needs of each group of students. One way of expanding the options available to students would be to explore the possibility of greater collaboration with other units. For example, the Faculty of Business offers courses in finance that would be appropriate for economics majors to take, and are accessible to these students – but few take advantage of these opportunities. A number of the masters courses at the Johnson Shoyama Public Policy School are taught at a level that is appropriate for a strong undergraduate student in economics. These courses could effectively expand the range of offerings available to senior undergraduates, giving them a richer undergraduate experience and better preparation for either the workplace or further graduate studies. To formalize these arrangements, we recommend:

R13: Explore the possibility of cross-listing selected policy school and business courses as electives in the program for fourth year honors economics students.

For recommendation 13 to have a real impact on students' educational experiences, it must be complemented by pro-active academic advising so students know that they need to contact business student advisors to register in courses in the Faculty of Business.

When recommendation 13 is implemented, the students who take public policy courses as undergraduates would be well-prepared for graduate work in public policy. To build upon that preparation, we recommend that:

R14: Students who take public policy school courses as undergraduate electives as per recommendation 13 be allowed the option of being fast-tracked into the Master of Public Policy program.

Appropriate academic advising would be key to the success of recommendations 13 and 14. However we are concerned that, even with appropriate advising, the opportunities for interchange with other units may be constrained by economics department's institutional location within the Faculty of Arts.

Given the experience of other universities, there may be some point in revisiting the fit of the Economics department within the university environment and faculty configuration given the tension between the technical requirements of mainstream economics education, the vision of economics as an applied area of study and the vision of economics as a more liberal arts program. Is the Faculty of Arts the best home for the Department of Economics given the nature of its programs, its technical requirements, its advising and student needs and research culture?

While economics at University of Regina is treated as part of liberal studies, this model is far from universal. A look at other Economics departments across the country shows a variety of models. At some universities, for example, the University of Toronto, economics is located within a Faculty of Arts and Science. At Lakehead University and at Dalhousie University, economics is located within the Faculty of Science. At Carleton University, economics is housed in the Faculty of Public Affairs. At Wilfred Laurier and at Guelph, the economics department is co-located with the business school. At UBC, economics is a stand-alone unit: the Vancouver School of Economics.

There are costs and benefits to revising this configuration, but it is a question that we recommend be asked:

R15: That there be a frank and open discussion at the Department and University level of whether the program, teaching and research needs of the Department of Economics could be better met in an alternate configuration than that which currently exists with its home in the Faculty of Arts.

One argument for reconfiguring the institutional position of the Department of Economics is that there are more opportunities for research collaboration, as well as more possibilities for cross-listing of courses, teaching exchanges, and the development of collaborative graduate programs, outside of the Faculty of Arts. It is to these opportunities that we now turn.

6. Staff Resourcing

In terms of total staffing resources, the self-study lists 14 faculty/instructors plus one Administrative Assistant. However, of these one is retired effective December 31st, 2018, and two are in “out of scope” positions. This effectively leaves 11 faculty/instructors of whom two are term appointments making for 9 full-time core faculty members. The Department was recently granted a new tenure track position and received approval to fill a vacant position resulting from Dr. Akhand’s retirement and therefore is in the process of recruiting two tenure track positions commencing in July 2019. The Department has achieved relative stability in its long-term academic resources, but still has class sizes that are at the high end for the Faculty of Arts and with the smallest proportion of smaller classes. While core full-time faculty should rise to 11 with the arrival of two new hires, effectively this only means 9 because of the major administrative roles of two more senior faculty. This of course creates a mentoring and leadership gap in the department which in the long run may operate to the detriment of advancing a stronger research culture in the department.

With respect to staff resourcing, there is also the matter of administrative support. The reviewers did not have a formal scheduled opportunity to meet the Administrative support person and therefore did not have the opportunity to discuss administrative support structures and resources for the economics department. We feel that future AURs should include a formal meeting with the administrative support staff.

R16: That future Academic Unit Reviews at the University of Regina schedule a visit between reviewers and department-level administrative support staff in order to gain insight on the departmental administrative support environment

We did learn that the Administrative Support person in the Department of Economics reports to the Faculty of Arts Human Resources Department in terms of supervision rather than the Economics Department Head. This was viewed in light of our experience with other academic economics departments we have reviewed in the past as curious given that day to day administrative support activity is focused on the Department of Economics. We believe that, from an accountability perspective, it would be desirable:

R17: That administrative staff in the Department of Economics report directly to the Economics Department head as their principal supervisor.

A final area of discussion during our visit was with regards to the ability of the Department of Economics at Regina to be competitive when recruiting faculty. While Regina has advantages in cost of living as well as the presence of cultural amenities common to capital cities, its distance from major centers

impacted research travel costs for faculty. As well, there is the issue of competitive salaries which can be addressed either by an increase in entry-level offers or by market supplements.

R18: Compensation is an issue in trying to attract faculty. Along with ensuring that offers are competitive with similarly placed universities, there is a continued need for market supplements given Regina's location in attracting and retaining faculty.

7. Degree to which the unit is meeting its internal and external service responsibilities

In terms of its external service activities, the Department of Economics is quite engaged in community contributions in terms of contributing research expertise, organizing public seminars and lectures as well as a seminar series, media activity and professional service such as journal reviewing. Some faculty expressed the sentiment that there was a lack of recognition for the achievements of the department when it came to some of its service activity – particularly media service – as well as recognition of research accomplishments and expertise.

8. Role the unit plays in meeting the University's vision, mission, goals and priorities

The mission of the University of Regina is to provide high quality and accessible education, influential and creative endeavors, and meaningful scholarly experiences in pursuit of knowledge by serving and engaging a diversity of students, life-long learners and communities with an emphasis on aboriginal earners and global citizens in a rewarding academic and work environment that fosters innovative learning, community engagement and critical independent thought. The Department of Economics provides a range of degrees that fulfill the mission of the university though it is in an implicit rather than explicit fashion.

The values of the University of Regina as iterated in the 2017-18 Annual Report include mutual respect, integrity and honesty; inclusivity and diversity; pursuit of knowledge; community and social responsibility; and accountability and well-being. The main priorities of the 2015-20 Strategic Plan are student success, research impact and community commitment within the over-arching themes of indigenization and sustainability. Again, the Department of Economics and its programs are implicitly in accord with these values.

The University of Regina has identified a number of strategic research clusters (anxiety, stress and pain; digital future; water, environment and clean energy; human health and social justice and community safety) and the Department of Economics plays a role in engaging in collaborative projects that align with these clusters. For example, as described in the self-study, Dr Stuart Wilson and Dr Kanybek Sagynbekov participate in the Social Justice & Community Safety Cluster. Dr. Harminder Guliani's collaborative work with multi-disciplinary research teams aligns with the University's Anxiety, Stress & Pain research cluster. Dr. Samuel Gamtessa and Dr. Brett Dolter are pursuing several research projects which align with the University's research cluster in Water, Environment and Clean Energy. The economic work on Cannabis is also work that can be considered part of a health-related cluster.

9. Financial resources of the unit

The annual budget of the Department has grown over time but most of this is outside their direct control given that the largest component is wages and salaries and reflects career progress and other increments. The unit has noted that it has been generating an increasing amount of CCE revenue which has been used to fund/supplement salaries for term positions. However, it effectively only retains 3.75% of CCE revenues.

It should be noted that the Department is a revenue generator for both the Faculty of Arts and the University in that its operating costs of approximately \$1.3 million are accompanied by tuition revenues of close to \$2 million plus one can add a contribution based on its share of the government grant. It would be beneficial if the Department was able to better retain a larger share of some of these revenues in order to enhance its research and teaching environment via additional research funding, course buyouts, travel funds and teaching assistantships.

Given the positive economic contribution of the Department of Economics to the university and Faculty of Arts finances, there needs to be more revenue retention to allow for the Department to invest in its faculty research development. Given the revenue streams generated by the Department of Economics for the University, consideration should be given to additional revenue retention for investments in conference travel and data resources and statistical research support for faculty in the Department. If new revenue generating programs such as Executive Education programs are developed by the Department of Economics, they should only undertake them if they are able to retain at least one-quarter of the gross revenues generated.

R19: The Department of Economics should be encouraged and allowed to generate and retain a larger percentage of revenues from current and future revenue generating activities for own use in order to enhance its internal research and travel support.

Summary List of Recommendations for Improvement and Innovation

R1: There needs to be proactive, effective, and tailored academic advising available to students

Rationale: Improve student preparation, student satisfaction, student outcomes, progress through the program, and completion rates.

R2: Economics be assigned a dedicated academic advisor. The academic advisor should be responsible for reaching out to stakeholders each year, identifying areas of concern, and consulting with respect to what advice should be given to students.

Rationale: Improve student preparation, student satisfaction, student outcomes, progress through the program, and completion rates.

R3: Require a minimum grade of C- on all prerequisite courses in the microeconomics/macroeconomics/quantitative methods sequence. So, for example, the pre-requisite for ECON 307 would be ECON 301 with a grade of C- or better, and the pre-requisite for ECON 301 would be ECON 201 with a grade of C- or better.

Rationale: Improve student preparation, and identify student who are at risk of falling below the 65% major GPA requirement at an early stage, thus supporting progression and timely completion.

R4: Consider introducing second-year courses with minimal pre-requisites, similar to the “Economics of Beer” and “Economics of Sport” courses currently offered, but which appeal to other demographic groups in the student body. We would suggest policy type courses such as dealing with the non-profit or volunteering sectors, community and regional economic development, gender, indigenous issues, or economic and social inequality.

Rationale: Increase the enrolments of underrepresented groups within the program.

R5: Work with other units to develop joint graduate programs in areas where the department has research strength and student demand is strong, such as big data, data analytics, sustainable energy, financial economics or health economics.

Rationale: utilize research strength; support the university’s strategic plan by increasing the number of joint programs; increasing opportunities Tri-Council funding by providing greater opportunities attracting training of graduate students

R6: Explore the possibilities of partnering with with the business or policy faculties to deliver Executive Education programs.

Rationale: utilize research and teaching strength of the units; support the university’s strategic plan by increasing opportunities for collaboration with the community; supporting the fiscal sustainability of the university.

R7: Explore the possibility of affiliating research active Department of Economics faculty with the Faculty of Business or the Johnson-Shoyama School, and promote exchanges of teaching resources between the units.

Rationale: support faculty research and engagement; support collaboration between units; encourage the development of interdisciplinary research and academic programming among Faculties.

R8: Resources directed at improving Tri-Council grant success rates should be directed to faculty pursuing collaborative research projects both within and external to the university.

Rationale: Support the university's strategic objectives of increasing Tri-Council funding and increased numbers of collaborative projects.

R9: There needs to be clearer articulation of unit level standards in research and promotion.

Rationale: Supporting faculty members in their research success.

R10: A hire at a senior level may be required to help build the research profile of the department, and provide leadership to junior faculty.

Rationale: Supporting faculty members in their research success.

R11: The department start a newsletter which is circulated to current students, alumni and the broader university community and celebrates departmental achievements. There should also be a university and faculty wide initiative to promote economics research and accomplishments. Note of major media contributions should also be included in this type of communication and recognition.

Rationale: Supporting faculty members in their research success; supporting the university's objectives of promoting news stories that focus on university successes and profiling University of Regina research successes internally and externally; deliver on University-level commitment to provide necessary resources to publicize research successes.

R12: Given the revenue streams generated by the Department of Economics for the University, consideration should be given for investments in course release, conference travel and data resources and statistical research support for faculty in the Department.

Rationale: Supporting faculty members in their research success.

R13: Explore the possibility of cross-listing selected policy school and business courses as electives in the program for fourth year honors economics students.

Rationale: Deepen course offerings for majors at lower department resource costs.

R14: Students who take public policy school courses as undergraduate electives as per recommendation 5 be fast-tracked into the Master of Public Policy program.

Rationale: Deepen experience of economics majors.

R15: That there be a frank and open discussion at the Department and University level of whether the program, teaching and research needs of the Department of Economics could be better met in an alternate configuration than that which currently exists with its home in the Faculty of Arts.

Rationale: Provide opportunity to ascertain the best needs of the Department of Economics.

R16: That future Academic Unit Reviews at the University of Regina schedule a visit between reviewers and department-level administrative support staff in order to gain insight on the departmental administrative support environment

Rationale: Administrative support is a key area of academic reviews.

R17: That administrative staff in the Department of Economics report directly to the Economics Department head as their principal supervisor.

Rationale: This would better serve immediate needs of Department of Economics.

R18: Compensation is an issue in trying to attract faculty. Along with ensuring that offers are competitive with similarly placed universities, there is a continued need for market supplements given Regina's location in attracting and retaining faculty.

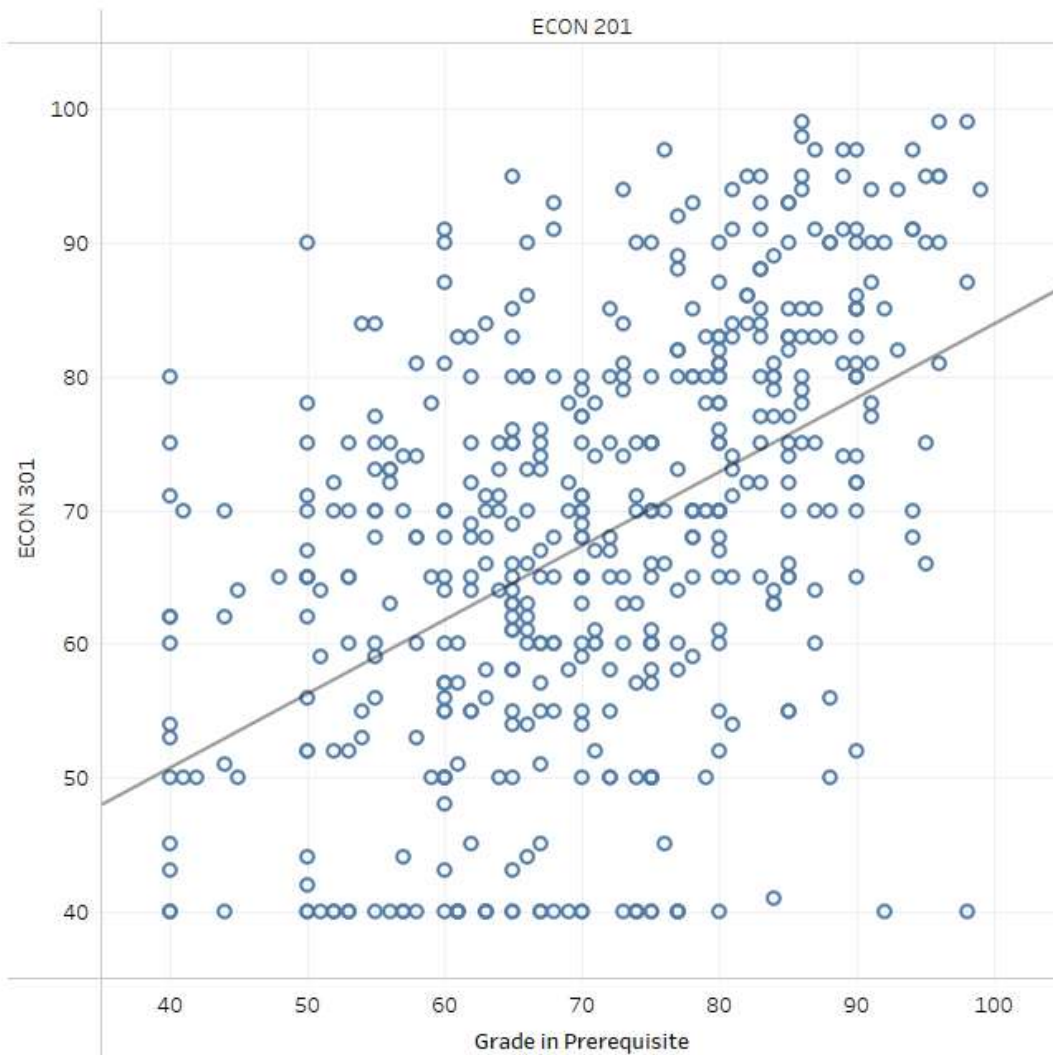
Rationale: To ensure recruitment and retention of best possible candidates.

R19: The Department of Economics should be encouraged and allowed to generate and retain a larger percentage of revenues from current and future revenue generating activities for own use in order to enhance its internal research and travel support.

Rationale: To foster support and investment for Department programs and activities given its large financial contributions to university finances.

Appendix:

Grades in **ECON 301** regressed upon prerequisite **ECON 201**



ECON 301 by grade in prerequisite **ECON 201**

	# students	Running Sum # students
80+	130	130
75-79	60	190
70-74	60	250
65-69	64	314
60-64	61	375
< 60	113	488
Grand..	488	488

Model formula: POST CRSE*PRE CRSE*(PRE_QLT_Y_PTS + intercept)

Number of modeled observations: 488

R-Squared: 0.213358

<u>Row</u>	<u>Column</u>	<u>p-value</u>	<u>DF</u>	<u>Term</u>	<u>Value</u>	<u>StdErr</u>	<u>t-value</u>	<u>p-value</u>
ECON 301	ECON 201	<.0001	486	PRE_QLT_Y_PTS	0.554402	0.0482881	11.4811	< 0.0001
				intercept	28.493	3.49416	8.15446	< 0.0001

NOTES:

- Any student with a “repeat” of course, in either Target or Prerequisite, is excluded from the analysis
- Grades for Targeted course occurs within prior 10 years, Prerequisite grades are available within prior 20 yrs
- Prerequisite must occur in a **prior** term to the Target, otherwise it is excluded from the analysis

Keith Fortowsky, Office of Resource Planning, April 5 2019

Table A1: SSHRC Insight Grants, Economics, 2015-2017 competition years	Total awarded
Canadian Mennonite University	\$40,760
Carleton University	\$21,877
Concordia University	\$97,066
HEC Montréal	\$58,164
McGill University	\$191,179
McMaster University	\$83,929
Queen's University	\$229,526
Simon Fraser University	\$240,808
The University of Calgary	\$68,430
Université de Montréal	\$79,983
Université du Québec à Montréal	\$63,479
Université Laval	\$46,074
University of Alberta	\$69,458
University of British Columbia	\$739,113
University of Guelph	\$147,635
University of Manitoba	\$82,012
University of Ottawa	\$114,189
University of Toronto	\$434,503
University of Waterloo	\$53,578
University of Western Ontario	\$197,072
Wilfrid Laurier University	\$48,701
York University	\$90,044
Grand Total	\$3,197,580
Calculated by F. Woolley from SSHRC Awards Engine data	