Graduate Task Force Report

Spring 2011

Members: M. Dornbush (chair), K. Franz, S. Gallagher-Lepak, A. Haynie, T. Kaufman, M. Marinetti, J. Martin, R. Meacham, T. Meyer, A. Parrillo, M. Russ, J. Samudra, D. Spielmann, and P. Terry

Outline:

I. Task Force Summary

The University of Wisconsin-Green Bay has long offered opportunities in graduate education. However, the extent of these programs has remained limited, with only four active programs operating today, offering Master's of Science degrees in Applied Leadership for Teaching and Learning, Environmental Science & Policy, Management, and Social Work. An additional Master's program in Nursing was granted system entitlement to plan in 2010. While these programs collectively build a strong core for graduate education, several factors limit the overall size and scope of graduate education at UW-Green Bay. In fact, UW-Green Bay ranks last among UW-System schools in Master's degrees granted as a proportion of total degrees granted. While limited state support and allocation to UW-Green Bay undoubtedly contribute to the challenges of offering graduate education at this institution, the Graduate Task Force has no direct ability to change this situation. For this reason, we focus our energy on identifying limiting factors and potential solutions that can be accomplished within the current funding structure.

Graduate programs are beneficial to the University and the community. Graduate programs create undergraduate research and employment opportunities, transfer faculty expertise into the community to promote the prosperity of our region and increase the visibility and prestige of our institution. Graduate students pay more tuition for fewer full-time credit hours, increasing University revenue without crowding classrooms at the same rate as occurs with equivalent tuition revenue increases based on growth in undergraduate enrollment. Graduate students teach introductory laboratories, could teach introductory discussion sections, and following graduation fill high-level positions that return internship and research opportunities back to the University.

Graduate programs rely on undergraduate programs. The current organizational structure of graduate programs at UW-Green Bay places them at a disadvantage relative to undergraduate programs in competing for limited University resources. It does not appear that undergraduate budgetary units benefit financially from housing graduate programs, but rather only face greater challenges in meeting staffing demands. UW-Green Bay currently has no mechanisms whereby Graduate tuition is tracked, and re-dispersed in an incentive based manner to support departments who house graduate programs. The entire 2010-2011 graduate budget amounts to roughly 13% of the direct tuition payments made by graduate students. However, even this estimate is an overestimation, as the vast majority of the graduate budget goes to support eight teaching assistantships, which in addition to providing significant classroom contact hours, pay virtually all of this money back to the University in tuition. Increased funding for graduate programs is needed, and could be accomplished via targeted return of graduate tuition, implementation of a graduate student fee in place of taking thesis credits, or through shared overhead dollars from external grants.

Faculty status in graduate programs is undefined. Graduate programs currently depend upon the generosity of undergraduate budgetary units to staff courses. This results in part from a lack of clearly defined responsibilities and expectations for those faculty carrying graduate faculty status. Both clearly defined graduate faculty expectations by graduate programs, and clearly defined position descriptions identifying the expected contribution of a faculty member toward graduate and undergraduate education would help to establish staffing expectations

(e.g. 50% graduate faculty appointment, etc). However, graduate faculty status must also include an incentive-based program to encourage faculty to agree to the greater responsibilities associated with overseeing graduate theses and projects, or for teaching graduate-level courses. This may be as simple as crediting faculty with load for serving on graduate thesis or project committees, by crediting faculty a larger load credit for teaching graduate courses, or by providing graduate faculty reduced classroom load with an associated expectation of greater granting activity and overhead generation. Irrespective, to work, both graduate faculty and non-graduate faculty appointments need greater flexibility to fully support both undergraduate and graduate programs. For example, some non-graduate faculty may prefer to teach a larger load if their merit scores appropriately de-emphasized scholarly productivity. Most importantly, this flexibility would allow faculty to maximize their strengths, and allow the University to optimize the differing talents of a diverse faculty body, and thereby likely increase faculty job satisfaction.

Graduate programs lack a strong campus voice. No graduate programs on campus have budgetary status. While this is not unique to UW-Green Bay, and may in fact be necessary to maintain interdisciplinary graduate programs, it is clear that graduate programs lack the political voice within the campus needed to be consistently included within University initiatives. Suggestions range from inclusion of graduate program chairs in the College-level Budgetary Chairs meetings, to the need for a much broader University organization that includes the creation of a Graduate School, Graduate Council, and Graduate Student Association. Irrespective of the exact model, the Task Force concludes that graduate programs currently lack the campus influence needed to support sustained growth in graduate education.

Marketing and visibility of graduate programs is limited. Existing graduate programs suffer from a lack of visibility on the campus website, and a lack of marketing by the University for its graduate programs. The 2010-2011 Itemized Budget for graduate studies included no money specifically designated for Marketing, and only $7,750 for Supplies & Expenses to support all four existing programs. The consequences of limited marketing are apparent; an average citizen in Green Bay is far more likely to be familiar with the numerous advertisements and billboards promoting the UW-Oshkosh MBA program than our own MS in Management. Lack of web-based marketing limits our ability to attract out-of-state and international graduate students, limiting tuition, and limiting the exposure of our students to broader world views.

Existing graduate programs have recommendations for growth. Existing graduate programs have been and remain creative in their attempts to maintain rigor and enrollment throughout recent funding challenges. Implementation of collaborative programs, integrated undergraduate-to-graduate programs, and expansion of offered emphases have all contributed to the strength of current programs. Recommendations are also included for future growth areas within each of the four existing graduate programs. These recommendations range from offering new collaborative programs among our existing graduate programs, to professional accreditation, the addition of select Doctoral programs, and the addition of new, non-thesis based programs to couple with existing programs to increase overall enrollment.

New graduate programs should be added strategically. New growth in graduate education should not come at the expense of existing programs, and new programs should be added only after careful economic assessment. Consideration needs to be given to develop new graduate

programs that align with the campus mission and that support present and future regional needs. Graduate programs that are interdisciplinary, promote environmental sustainability, and allow graduate students to address complex issues in a diverse and global world would best support UW-Green Bay's mission.

Faculty interest in developing new graduate programs exists. Survey responses by Chairs and Directors provided numerous suggestions for new or expanded graduate programs. These programs sorted into five general categories that included Art, Environment, Health, Management/Leadership, and Other. Many of these programs align with projected areas for job growth, included interdisciplinary cores, and appear to fit into unfilled niches within the UW-System. However, development of new programs is time consuming, should be done cautiously, requires financial resources, and involves a two phase UW-System approval process. New program growth currently depends heavily on faculty initiative and time; a process which could be greatly aided by implementation of a formalized support structure to facilitate program development.

University commitment to Graduate Education is unclear. The University Mission Statement makes no reference to offering either Bachelor's or Master's education. Mixed opinions currently exist within the University community as to the preferred composition of the UW-Green Bay education portfolio. Some faculty appear to view the mission of UW-Green Bay as focused solely on undergraduate education, while many faculty strongly support an expansion of graduate education on our campus. A clear message from the administration is needed to clarify the University's current support for graduate education, and charter the future direction of our campus' educational offerings.

II. Problem statement:

The University of Wisconsin-Green Bay is a comprehensive state university with approximately 6,636 students as of fall 2010, graduating 1,103 Bachelor students, from 2009 to 2010. The undergraduate program at the University of Wisconsin-Green Bay supports approximately 39 active undergraduate majors. In contrast, this same university supports only 4 graduate programs, which graduated only 48 Master's students in 2010. This placed **UW-Green Bay as the Institution graduating the fewest Master's students, as a percentage of the total degrees granted, within the entire UW-System's collection of 4 year institutions (Figure 1).**

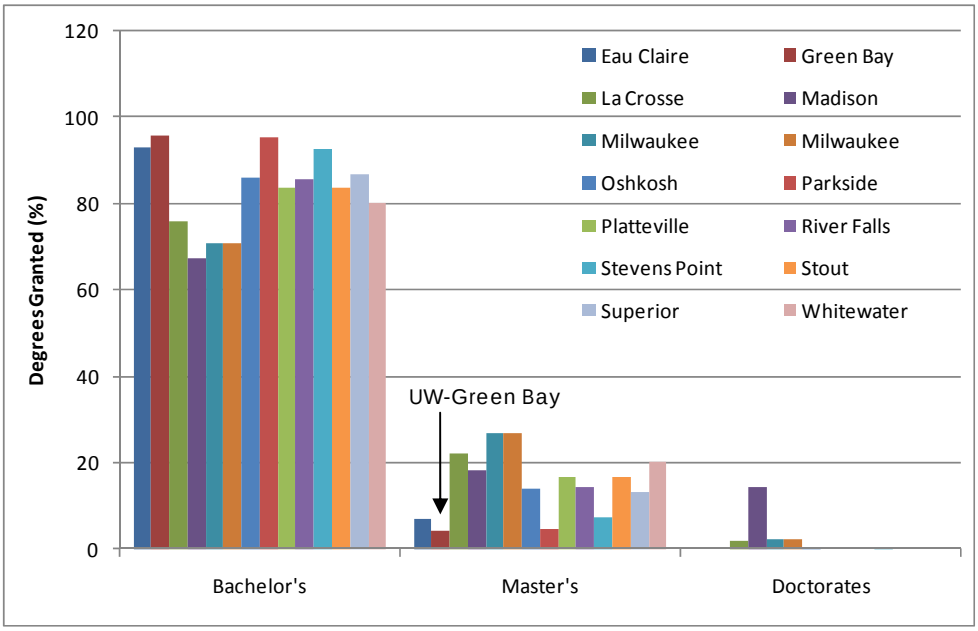

Figure 1: Percentage of total degrees granted by UW-System four-year institutions at the Bachelor's, Master's, or Doctoral level. All numbers are for the year 2008 to 2009 or 2009 to 2010. Data taken from http://www.collegeportraits.org/WI/.

Why is it important to increase graduate degrees for UW-Green Bay? First, future workforce demands require Master's-level educations (NRC 2008). In this regard, UW-Green Bay is falling short of meeting the regional needs of Northeastern Wisconsin. If UW-Green Bay does not provide local graduate opportunities for our region's workforce, this need will either be met by another institution, or will result in the stagnation of the regional economy. Second, UW-Green Bay is not only lagging in the production of total Master's degrees granted, but it is far below the expected level of Master's degrees produced as a percentage of total degrees awarded for comparable sized UW-system institutions (Figure 2). In fact, when viewing the UW-system institutions it appears that there are two groups of institutions; those that have built their graduate programs, and those that have not supported the same level of growth in both undergraduate and graduate programs (e.g. Parkside, Green Bay, Eau Claire, Oshkosh) (Figure 2). We represent one member of the UW-System institutions who offer limited graduate education offerings, even after controlling for enrollment size. Historic trends in UW-Green Bay's awarded degrees may shed light on how we have come to our current situation. While we

have awarded roughly 20 additional Bachelor degrees per year since 1985, Master's degrees have only increased at a marginally significant rate of 1.5 per year (Figure 3).

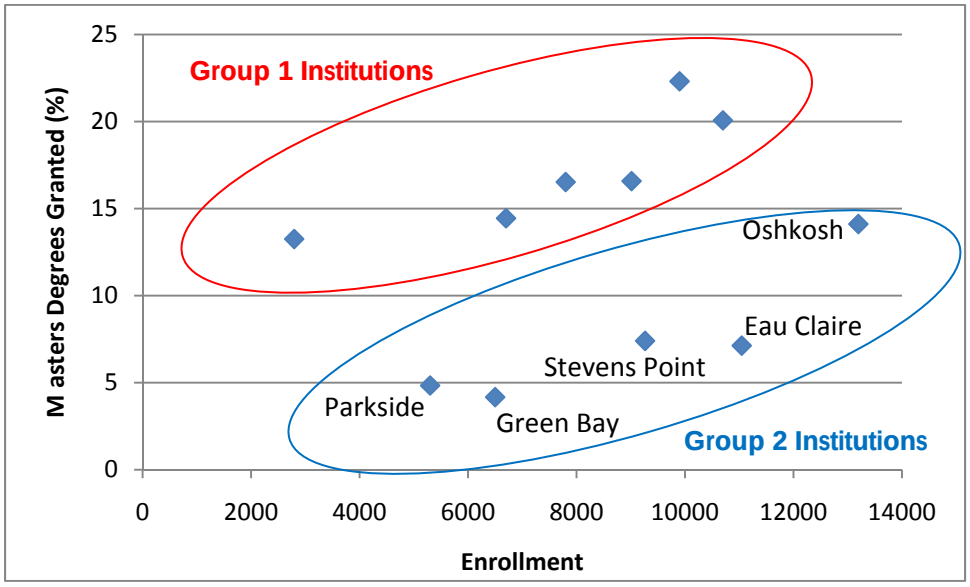

Figure 2: Relationship between student enrollment and the percentage of total granted degrees at the Master's level by UW-System four-year institutions. All numbers are for the year 2008 to 2009 or 2009 to 2010. Data taken from http://www.collegeportraits.org/WI/.

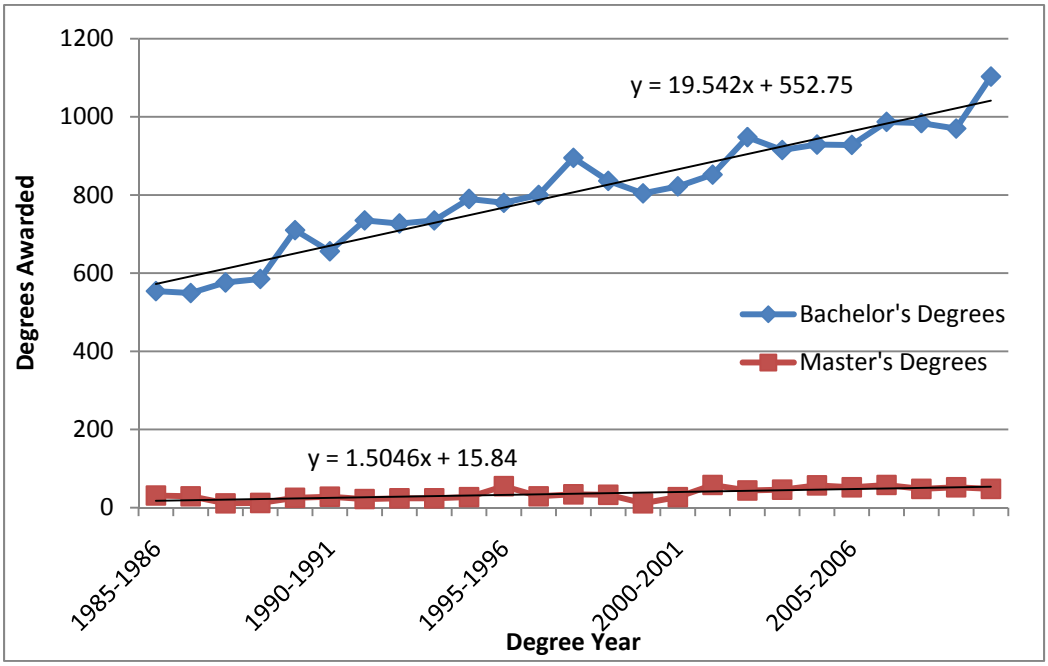

Figure 3: Temporal changes in Bachelors and Master's degrees awarded by UW-Green Bay.

Irrespective of the political basis, institutional choices, or funding restrictions responsible for this pattern, the current situation has significant economic implications for the University's fiscal strength and regional influence. Assuming UW-Green Bay's Master's programs were

comparable to UW-System institutions designated as "Group 1 Institutions" (Figure 2), UW-Green Bay would now be graduating an average of 156 more Master level students per year (Figure 4). **Taking this number of 156 lost Master's graduates per year, assuming that the average graduate program requires 30 credits for graduation, and assuming that graduate credits are charged at a rate of $389.16 per credit hour, excluding student segregated fees, UW-Green Bay is losing approximately $1,821,268.80 per year in direct graduate tuition payments.**

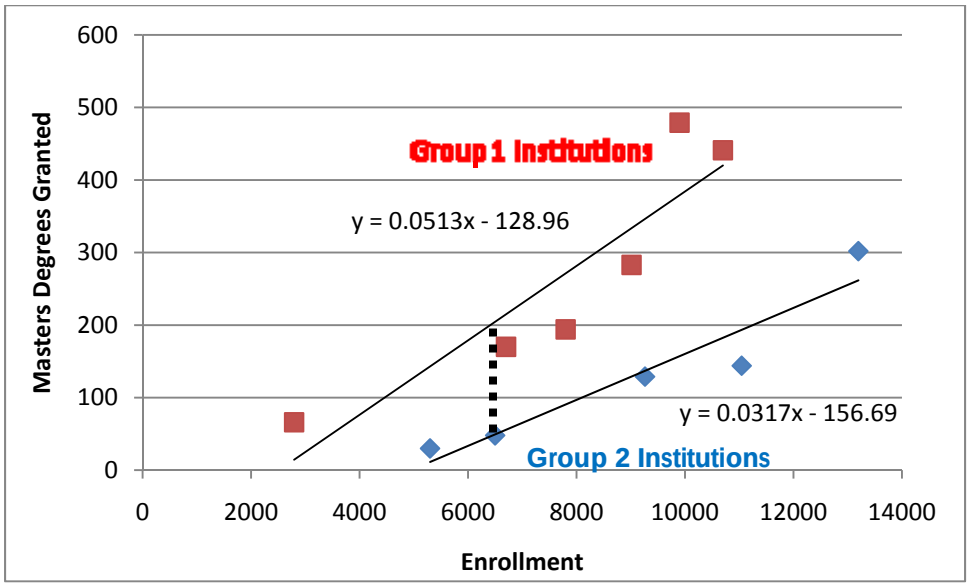

Figure 4: Absolute difference in annual Master's degrees granted between UW-System four-year institutions that have larger (Group 1) and smaller (Group 2) Master's degree programs. The dotted line represents the absolute difference between the number of degrees granted by UW-Green Bay (blue dot) and the expected number of Master's degrees granted if UW-Green Bay granted Master's degrees at a comparable level to institutions in group 1.

There appears to be a widely held position at UW-Green Bay that our graduate and undergraduate programs simply compete for already limited resources. While we address this issue in greater detail below, the Graduate Task Force argues this does not need to be the case, and in the contrary, we suggest that vibrant graduate programs greatly strengthen, not harm, our undergraduate programs. One clear example of a mutually beneficial relationship between undergraduate and graduate education is found with the integrated undergraduate–to-graduate program available through the Environmental Science & Policy graduate Program. Since initiation in 2008, the Integrated Program has increased the retention of the very best UW-Green Bay undergraduates in Environmental Science and Environmental Policy by directly transitioning them into the ES&P Master's Program. In this program, top students begin their graduate research and course work while still completing their undergraduate degrees. The outcome is that students can potentially reduce the total time needed to complete both their bachelor and master's degrees, while their participation directly improves the ES&P Program by increasing graduate course enrollment, and by retaining high quality students here at UW-Green Bay. This is also a particularly fitting model for our University, helping to facilitate and encourage many first generation college students to pursue the often complicated process of obtaining a graduate education in the sciences. **Clearly, UW-Green Bay's Integrated Graduate Program in**

Environmental Science & Policy should be marketed to prospective undergraduate students interested in Environmental Science and Environmental Policy, and serves as a robust example of the mutual benefits resulting from cooperating graduate and undergraduate programs.

Graduate programs are also central in the recruitment of quality faculty, as reflected in the 2010-2011 UW-Green Bay Growth Agenda Accountability Report (http://www.uwsa.edu/opar/ accountability/invest11/gby.pdf), noting that 70% of all UW-Green Bay faculty stated that, "becoming an authority in their field is "very important" or "essential." For many fields, academic productivity necessitates vital graduate programs. Graduate projects strengthen our University's presence in the local, regional, and global community. Graduate projects take faculty expertise and make them accessible to the world, enhancing everything from economic development to social justice. In fact, no projects are conducted in isolation, and by definition the dissemination of research results places faculty on venues ranging from international publications, to regional radio broadcasts, to local town hall meetings. Finally graduate research requires that faculty obtain external grants to support their work and their graduate students. These projects provide important, and notably more flexible, overhead dollars to the university. These projects also result in the purchase of equipment and technology that is available, and utilized to enhance undergraduate learning experiences. Graduate research projects provide opportunities for paid hourly employment, and importantly, undergraduate research opportunities. In the sciences, undergraduate research is essentially required for admittance into quality graduate programs. Graduate students themselves serve as effective mentors for undergraduate student researchers, increasing the total number of research experiences available by reducing the amount of time needed by faculty to oversee undergraduate projects. **Thus, existing structural complications aside, graduate programs implemented on a scale that balances UW-Green Bay's commitment to scholarly activity, outreach, and undergraduate education undoubtedly enhances, not competes with, our undergraduate programs.**

III. Current UW-Green Bay Graduate Programs:

A. Overview:

The University of Wisconsin-Green Bay currently supports four active graduate programs, offering M.S. degrees in Applied Leadership for Teaching and Learning, Environmental Science & Policy, Management, and Social Work. A Master's of Nursing degree gained UW-System entitlement for planning in March of 2010 and remains in development. Historically, Master's degrees were also offered in Human Services (last degrees granted 1998-1999) and Administrative Science (last degrees granted 2004-2005). Upon completion of all current graduate programs, students earn a Master's of Science (M.S.) from the University of Wisconsin-Green Bay. **From the years 1990 to 2010, graduate program enrollment at the UW-Green Bay peaked in 1992 (Figure 5), supporting a total combined fall enrollment of 157 students across the three existing programs (Environmental Science & Policy, Human Services, and Administrative Science).** Graduate programs declined dramatically during the 1990's, reaching lows in 1997 and 1998, at a point at which only two actives programs were operating (Environmental Science & Policy, and Management). Since the late 1990's, graduate enrollment has gradually returned to near 1992 levels (Figure 5). At this point it is unclear as to what factors promoted the strong

decline noted during the late 1990's. As a mark of the institutional focus needed to meet graduate program performance goals equivalent to Group 1 UW-System Institutions (Figure 4), UW-Green Bay's combined graduate program enrollment for Fall 2010 (Figure 5) is currently equal to the total number of awarded Master's-level degrees that would need to be added on an annual basis. **UW-Green Bay requires significant institutional focus to transform its graduate studies to a production level equivalent to that of comparable Group 1, UW-System institutions (Figure 4).**

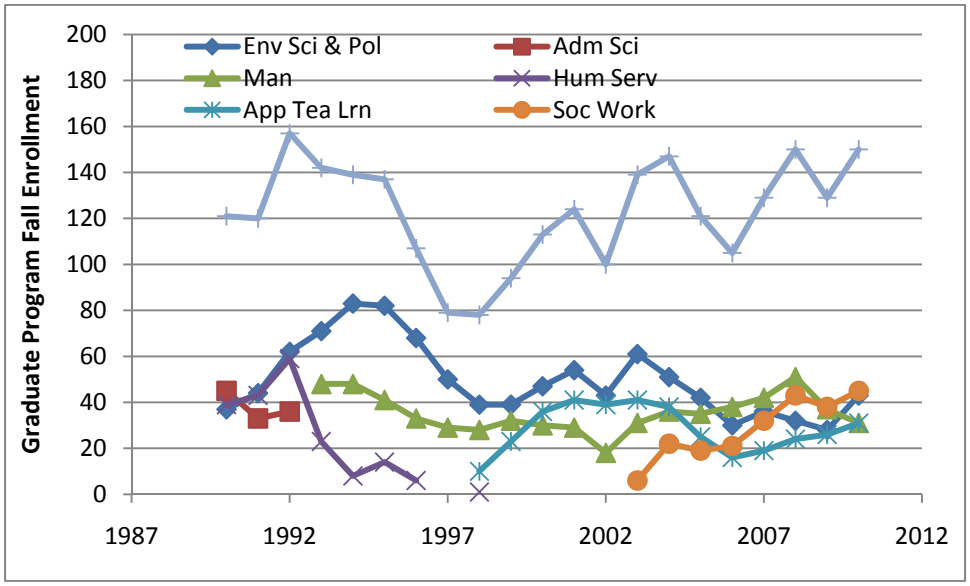

Figure 5: Fall semester graduate program enrollment at UW-Green Bay from 1990 to 2010. Data compiled by D. Furlong, Institutional Research.

B. Shared Program Characteristics:

Thesis or project themes:

- Applied Leadership requires either a thesis or a classroom based inquiry project
- Environmental Science and Policy requires a thesis
- Management and Social Work programs require a professional project

Reliance on undergraduate budgetary units:

- **Applied Leadership for Teaching and Learning, Environmental Science and Policy, Management, and Social Work programs all rely on the generosity of undergraduate budgetary units for course staffing.**

C. Shared Program Strengths:

Strong core faculty:

- All four graduate programs are carried by a core of strong, dedicated faculty.

Meeting the needs of the NEW region:

- Each program was created to meet the needs of regional public and private sector organizations including local industry and businesses and state, county, and city

organizations. Programs also meet the needs of the regional population for post-baccalaureate education.

Integration with community:

- **Through classroom-based inquiry projects and employment during and after graduation, through thesis projects coordinated through EMBI and other public/private sector partnerships, through professional project completion and the field practicum supervised by practicing social workers, all four MS programs are strongly integrated into the NEW community.**

D. Shared Program Challenges:

Win-Lose relationship with undergraduate programs:

- All four graduate programs at UWGB are built upon the undergraduate programs in Education, Environmental Science, Public and Environmental Affairs, Business Administration and Social Work. Hence, under the current structural arrangement growing graduate programs comes at a cost to undergraduate programs and maintaining undergraduate programs takes resources from graduate programs. This is particularly problematic today, with rising undergraduate enrollments from the growth agenda coinciding with a period of shrinking state support. Under the current structure, neither graduate nor undergraduate programs can grow without taking resources from the other. Growing both simultaneously is not possible. Flexible funding and a different funding model must occur.

Faculty workload and compensation:

- All 4 graduate programs require either thesis projects, professional projects, classroom based inquiry projects, or supervised field practicums, all of which require significant faculty mentoring. Currently, mentoring is achieved by a dedicated core of faculty without additional compensation or a reduction in class-room teaching loads. This is not a sustainable model and some faculty have already opted out of graduate program participation, simultaneously increasing the workload for remaining graduate faculty. As faculty morale continues to decline and faculty have to take on overload teaching opportunities to supplement incomes, participation is likely to further decline. **It is essential that a model for compensating faculty who supervise student thesis projects, professional projects, classroom based inquiry projects, or supervised field practicums be created, documented in writing, and formally approved.**

Marketing and advocacy:

- All four graduate programs have been impacted by the loss of the half-time Associate Dean of Graduate Studies position whose duties included the marketing of graduate programs. In addition, The Management program faces regional competition from similar programs. **A marketing budget and strategy would help differentiate UWGB's programs from their competition and simply make more prospective students aware of our programs.**

Legislative uncertainty:

- Recent proposed legislative changes will undoubtedly affect instructional capabilities, faculty morale, and alter demand for graduate degrees. Graduate programs at UWGB face significant challenges in planning and implementing initiatives to improve graduate programs at UWGB in the face of legislative uncertainty and diminishing state support.

E. Program Summaries:

1. Applied Leadership for Teaching and Learning:

The University of Wisconsin-Green Bay's Master's Degree in Applied Leadership for Teaching and Learning recognizes the valuable contributions of experienced educators and their ability to engage in professional development with a community of learners. With this understanding as its foundation, the program provides experienced educators with the opportunity to advance their knowledge and skills to become recognized leaders within their profession.

Program Details:

A. Degree granted:
- Master of Science

B. Credit requirement:
- 30 credit minimum; 21 credit core & 9 credit area of emphasis
- Classroom based inquiry project or thesis required (6 thesis credits are part of 30 credit minimum)

C. Areas of emphasis:
- *Teaching English as a second language*
- *Others as fitted to individual students*

D. Course delivery options:
- Currently a weekend offering, meeting approximately 7 Saturdays per semester

E. Budgetary units supporting courses:
- Education

F. Disciplines supporting programs:
- Education, Natural and Applied Sciences (2 faculty), First Nations Studies (1 faculty)

G. Faculty counts:
- 11

H. Students:
- Approximately 40 (a cohort of 20 is admitted annually)

I. Current challenges:

- Pending legislative changes to K-12 funding and collective bargaining rites

  This is the biggest challenge facing the program. Proposed changes would significantly change pay incentives for practicing teachers. The collectively bargained incentive in salary compensation with increasing education has been the driving force motivating teachers to seek Master's degrees. If the pending legislation passes, it will have an immediate negative impact on the number of students applying to and enrolled within this graduate program.

- Funding:

  There is a need to develop an incentive based model that both rewards faculty for work in graduate education, and that compensates undergraduate budgetary units housing graduate programs for the greater staffing pressures that they face from supporting both undergraduate and graduate degree programs.

- Creating a EdD degree for Educators;

There is a largely untapped pool of educators interested in earning an EdD degree, with a specialization in administrative certification. If offered, this degree is expected to receive strong regional enrollment using an off-campus cohort model.

- Exploring On-line delivery:

  This area is in need of development.

J. Recent innovations/Special programs:

- Professional project option:

  A project option has been implemented for practicing teachers, who generally prefer a project option over a traditional thesis.

- Learning teams:

  There has been interest in developing multiple member teams drawn from specific schools or professional settings to look at issues impacting teaching and learning in classrooms, schools, and districts.

- Bilingual teacher education:

  There has been a consistent flow of regional second language teachers into our program, following recent regional demographic changes.

- Connection to Professional Development Certificate (PDC):

  The Applied Leadership program has collaborated with the Institute for Learning Partnership to offer practicing teachers completing their PDC an opportunity to use this work as an area of emphasis in our MS program.

- Impact on undergraduate teacher preparation:

  The MSAL program plays a vital role in the successful preparation of future teachers. Many MS candidates come from partner schools and serve as cooperating teachers for student teaching placements, and provide valuable clinical sites for our pre-service teachers.

- First Nation Studies partnership:

  A close partnership with First Nation Studies has existed for the past three years. The numbers of Native American candidates in our program has been consistent and growing.

2. Environmental Science and Policy:

The Environmental Science & Policy M.S. program is an interdisciplinary program providing a course of study to prepare graduates for careers in scientific, technical, and administrative positions. The focus is on interdisciplinary approaches to environmental challenges. The program is thesis based; in addition to completing 28 credits of coursework and 6 thesis credits, all students must complete and defend a research based thesis to earn their degree.

Program Details:

A. Degree granted:

- Master of Science (Thesis based option only)

B. Credit requirement:

- 34 credit minimum; 19 credit core & 15 credit area of emphasis.

- Research based thesis required (6 thesis credits are part of 19 credit core)

C. Areas of emphasis:

- *Ecosystem studies*: Focuses on issues related to ecosystem structure and function such as nutrient regeneration and productivity, complex ecosystem relationships, and biodiversity.
- *Environmental Technology and Analysis* (formerly *Resource Management*): Studies issues of resource management, environmental analysis and modeling, remediation of impacted environments, and waste processing, treatment and disposal.
- *Environmental Policy and Administration*: Investigates the characteristics and operation of governments, organizational and regulatory policy, and the formulation, implementation and evaluation of environmental law and policies.
- *Environmental Business*: Investigates issues of environmental sustainability in the context of business and management (approved by ES&P, *pending implementation*).

D. Course delivery options:

- Primarily lecture and laboratory based courses.
- Many courses offered in the evening to meet needs of returning students.
- A few courses are offered in an on-line format.
- Two winter interim travel courses to Panama and Costa Rica are also available.

E. Budgetary Units supporting courses:

- Natural and Applied Sciences (NAS)
- Political and Environmental Affairs (PEA)

F. Disciplines supporting programs:

- Biology, Chemistry, Engineering, Geoscience, Mathematics and Statistics, Physics, Human Biology, Geography, Political Science, Environmental Policy and Planning

G. Faculty counts:

- 29 voting UWGB faculty members plus several non-voting adjuncts

H. Student numbers:

- Approximately 50; both full time and part time

I. Current challenges:

- Compensation for graduate faculty members:

  Despite the workload associated with mentoring students through thesis development and completion, ES&P faculty receive no class-room instructional load reductions or other compensation for chairing or participating on thesis committees. Several years ago, there was a single course reassignment given after a faculty member chaired 6 student committees through successful thesis defense. This was lost due to budget cuts.

- Recent budget and TA cuts:

  Five years ago, the ES&P program had 17 teaching assistant positions that were awarded competitively and were used to provide instruction for undergraduate laboratory and discussion sections in the NAS, HUB, and PEA undergraduate programs. These 17 TA's were cut to 8 TAs five years ago. Not only have undergraduate units suffered the loss of instruction, but because TA positions come with in-state tuition waivers, the ability of the program to recruit out of state and international students has also been negatively impacted. This was particularly damaging to the Environmental Policy and Administration emphasis, which lost all 6 of its TA positions. Enrollment in this emphasis has declined as a result.

- Not enough 700 level courses:

Because the graduate program is supported by undergraduate budgetary units struggling to meet student demand for undergraduate courses, there is currently a shortage of graduate-level course offerings. UWGB undergraduates transitioning into the graduate program have specifically noted a limited number of courses available for them, as they have already taken many of the cross-listed courses while completing their undergraduate degrees.

- Unbalanced faculty loads:

  Because there is no compensation to chair or participate on thesis committees, graduate faculty participate in an unbalanced manner. This creates a heavy burden on vested faculty to carry the program. This challenge could be overcome with adequate compensation as an incentive, and an expectation of a minimum level of activity to maintain graduate faculty status. However, with no complementary incentive, those faculty currently participating at a marginal level may simply opt out of participation completely.

- Marketing:

  Seven years ago, UWGB employed a part time associate dean of graduate studies, whose job included marketing the program. When this position was lost, ES&P received a one-time $5000 budget for program marketing, which significantly increased both program inquiries and enrollments for the next year. An annual marketing budget is required to maintain quality high enrollments.

J. Recent innovations/Special programs:

- Integrated Program:

  This 3 year old program allows highly qualified UWGB undergraduate students to begin coursework and research toward a MS degree in ES&P while in their final year of undergraduate study. This program maintains the present University requirements for both the BS and MS degrees, so no curricular changes were required. Creation of this program required a change in University graduate program policy that would allow undergraduate students to take as many as 15 credits of graduate work prior to completion of the undergraduate degree. Admissions policies, policy regulating enrollment in undergraduate classes, and tuition and financial aid were addressed in the development of this program.

- Environmental Business emphasis:

  This new emphasis was initiated in 2010 in conjunction with the Environmental Management and Business Institute (EMBI), to provide students with the science, policy, management, and accounting tools needed to make sustainability initiatives economically viable. It also creates a partnership between the Management and ES&P programs.

- Rebranding of Environmental Technology and Management emphases (formerly Resource Management emphasis):

  The rebranded emphasis is a modification of the former Resource Management emphasis to better address faculty expertise in environmental engineering, chemistry, geosciences, physics, and modeling of environmental systems with the goal of better recruitment of students with backgrounds and interests in these disciplines.

- Emergency Management Planning and Administration certification:

  In 2005, the Office of Outreach and Extension at UW-Green Bay created a 15 credit certification program in Emergency Management Planning and Administration to meet

the growing needs of the community for such expertise. The ES&P program allows the five courses offered in this certification to be taken for graduate credit.

- Costa-Rica and Panama travel courses:

  Two travel courses have been initiated in the past 10 years by ES&P faculty, one to Panama and one to Costa Rica. While both of these experiences are housed in undergraduate budgetary units, the courses may be taken for graduate credit by ES&P students and have the potential to create avenues of thesis research for students while adding an international component to our graduate program.

3. Management

The Master's in Management at UW-Green Bay prepares business leaders to be immediate and valuable contributors in the world. The professional program in business provides a high quality, life transforming education that prepares students to ethically and critically address complex business issues; creates knowledge through research to enhance experiential learning and makes meaningful contributions to the science of business; and partners with businesses to improve sustainability, innovation, and entrepreneurship initiatives by engaging students as informed business professionals.

Program Details:

A. Degree granted:
- Master of Science

B. Credit requirement:
- Old program: 30 credits; six required courses, three elective management courses, and a 3 credit professional project
- New program (in last stages of design): 30 credits

C. Areas of emphasis:
- The existing program does not have emphases
- The new program (in last stages of design): emphases will be determined by the 3 elective classes given below in parentheses
  - *Leadership* (Leading the Self, Team leadership, Organizational leadership)
  - *Information systems management* (Strategic information management, System analysis, E-business/E-commerce)
  - *Sustainability* (Managing for sustainability, Resource management, Quality management)

D. Course delivery options:
- Primarily traditional lecture courses, but offered as evening or weekend classes to accommodate employed adult learners

E. Budgetary Units supporting courses:
- Business Administration

F. Disciplines supporting programs:
- Business Administration

G. Faculty counts:
- About ten

H. Student count:
- Between 30 to 50 (varying over past decade); currently 31

I. Current challenges:

- Structure:

  Because the graduate program is supported by the undergraduate Business Administration program, growth of the graduate program translates into cannibalization of the undergraduate program and vice-versa. It is a win-lose game either way.

- UW-Oshkosh has an accredited MBA/other accredited on-line delivery programs
- Lack of AACSB accreditation
- Underdeveloped connections with the business community
- Lack of internal and external advertising and marketing
- Lack of alumni organization
- Master of management not a buzz word like MBA or Leadership

J. Recent innovations/Special programs:

- New program:

  The MS in Management program is in the last stages of redesign. The new program will include 8 required core courses (Managing behavior in organizations, Financial management, Business and marketing strategy, Managing for sustainability, Leading the self, Innovation and Entrepreneurship, Strategic information management, Capstone applied project). There are 3 focus areas, each of which has two required courses, which are listed above in parentheses following each area of emphasis (see C. Areas of emphasis).

- Bordeaux Degree Partnership (Bordeaux, France):

  This international program, a first of its kind in Northeast Wisconsin and one of the first such programs in the UW System, will enable UWGB graduate students, and those from overseas, the chance to enrich their learning by studying abroad. This is an exciting opportunity with partners at the highly regarded BEM Bordeaux Management School. Participating students from either school enroll in a minimum of 15 credits at UWGB (fall semester). During the following semester (spring), students complete the equivalent of 15 credits at Bordeaux. These credits will be accepted as transfer credits in the Master's of Management Program at UWGB. Students will complete their degree requirements the following academic year. At the end of the program students are granted two Master diplomas, one from each participating University. The first two students graduated from this collaborative program this year.

4. Social Work

UW-Green Bay and UW-Oshkosh have established a Collaborative MSW program that prepares social workers for advanced practice as facilitators, partners and leaders in planned change activities with service users and community service providers. The program's goal is to educate professionals ready to assume administrative and direct practice roles within this region's increasingly diverse and transforming rural and metropolitan environments. The program also aims to prepare practitioners who can work to strengthen families through services and policies supportive of family and community well being; who can engage in interdisciplinary learning and coordinated inter-professional practice; who can provide leadership in the community and in civic life; and who can encourage and guide the inclusion and representation of Native Americans and other cultures in the region.

Program Details:

A. Degree granted:
- Master of Social Work

B. Credit requirement:
- 58 credit program; highly structured with extensive field practicum components

C. Areas of emphasis:
- *Advanced Direct Practice*: Prepares students for leadership in the field through their work with and on behalf of individuals, groups, and families.
- *Administration/Management*: Admits students who are interested providing leadership in their supervisory and management responsibilities, particularly in public and tribal social service settings.

D. Course delivery options:
- Evening and weekend classes designed for working students, both on-line and hybrid courses.

E. Budgetary Units supporting courses:
- Social Work

F. Disciplines supporting programs:
- Collaborate and draw on other graduate course offerings whenever possible (Management, Environmental Science & Policy, Human Development, and MPA Program at UW-Oshkosh)

G. Faculty counts:
- Approximately twelve

H. Student counts:
- 90 students (split between UW-Green Bay and UW-Oshkosh)

I. Current challenges:
- Affordability for students.
- Need for off campus travel compensation for faculty.
- Responsiveness, availability, flexibility of university resources for graduate students and graduate student needs.
- Program operations depend upon a soft money base.

J. Recent innovations/Special programs:
- Collaborative program with UW-Oshkosh Social Work Department.
- Agreement with UW-Fox Valley.

F. Strengthening Existing Graduate Programs:

1. Marketing UW-Green Bay's Graduate Programs

UWGB has strong graduate programs, but has failed in recent years to market these programs either regionally or on a greater scale. An informal survey indicates that many citizens of the region are unaware of UW-Green Bay's graduate offerings. The institution could better promote graduate programs in a cost effective manner by improving visibility on the University's

webpage, updating and improving the graduate program's webpage, advertising in popular, high volume graduate program website search engines, and having better advocacy for graduate programs on campus. While it is undeniable that our graduate programs will have a difficult time selling themselves without greater and more stable funding for assistantships and a better faculty to student ratio, what we can advertise is the quality of our faculty, uniqueness of our programs, and the successes of our graduate students.

- **Associate Dean of Graduate Programs:**
  Until 2005, UWGB funded a part-time position as associate dean of graduate studies. This position was used to market and promote UW-Green Bay's graduate programs regionally and to support the program on campus. Some of the bureaucratic aspects of the position were transferred to the Dean of Graduate and Professional Program's office and others were directed to the chairs of the individual graduate programs. What was lost was the time spent traveling to and participating in regional graduate fairs, promotion of the programs on campus, and advocating for the programs to campus and UW-System administrations. **Resources available to graduate programs have eroded since this position was lost; yet an advocate is needed to stress the importance of graduate studies, to secure limited University resources, and to increase the regional to campus-level visibility of our graduate programs.**

- **Current UW-Green Bay Home Page:**
  Unlike most other universities with graduate programs, UW-Green Bay's website has no tab to access "graduate programs" from its home page. In order to find graduate programs one must click:
  a. Home page, then
  b. Future students, then search that page for the obscurely located "resources and tools," then click
  c. Admissions, then search that page for the third tier of options, in the almost obscure list, entitles "Apply," then click
  d. Graduate Programs, which finally opens to a page listing all of our programs.

  Instead of five clicks from the home page, and having to navigate through some overly complex organization, we suggest a direct link to the graduate programs page from the home page. One example is from UW-Eau Claire, which has a drop down menu for all prospective students (including graduate students) on its home page. http://www.uwec.edu/. UW-Oshkosh's home page has a drop-down menu under "Future Students" that opens right to graduate studies. http://www.uwosh.edu/home.

- Graduate Studies (all programs) webpage (http://www.uwgb.edu/graduate/):
  This page is generic and does almost nothing to sell the convenience, history, successes, distinctiveness, affordability, or other benefits of our programs. A potential consumer asks, "Why UW-Green Bay's graduate program over any other in the area?" In contrast, UW-Oshkosh's graduate studies page offers a good model for how to invite a student: http://www.uwosh.edu/gradstudies. So, too, does UW-Stevens Point: http://www.uwsp.edu/NEWS/uwspcatalog/graduate.htm.

- Individual Program Webpages:

These sites are where UW-Green Bay has the opportunity to sell each graduate program by highlighting its uniqueness, outstanding faculty, and student successes. For example, the Master's of Environmental Science & Policy home page is beautifully laid out, and features some serviceable language touting the uniqueness of the program and faculty. Moreover, the page easily links to past capstone projects, which nicely highlights the seriousness and depth of the degree. This program also has a great link to "alumni," which again illustrates the success of a degree like this. However, even this page branches off into a "faculty" page that is simply an index of individual faculty pages. It is a missed opportunity to summarize the honors, awards, and research of the faculty as a body - and could be easily added to this page and all other "faculty" pages for our graduate programs. Our other programs have mostly inviting home pages with links to news-making alumni (Social Work), exciting opportunities (Management), and student projects. With a few tweaks, our individual program pages could be informative, inviting, and dynamic. The same level of care should be applied to the UW-Green Bay home and graduate pages as well.

- **Publicity in Other Venues:**
  The most frequently used search engine for those investigating graduate programs is http://www.gradschools.com. This site has basic program listings under academic areas and additional high profile portal buttons that give priority high visibility to subscribing programs. For one year recently, the ES&P graduate program was granted $4000 to have a high profile portal button on this site under both the Environmental Science & Environmental Policy categories. **While exact numbers are not available, interest in and applications to the ES&P Program approximately doubled in the three semesters following the online advertising.** Because the portal site was not renewed, interest and applications to the program declined after one year. Gradschools.com is a relatively inexpensive, high profile advertising site used by many graduate programs at US institutions that is viewed internationally.

- **Faculty-Student Ratio:**
  At UW-Green Bay, our advertised student-to-faculty ratio is 26:1. This is a higher ratio than at other UW System schools offering graduate programs, and comparable to our campus in other ways. When shopping for programs, prospective graduate students take note of these numbers, which they know will impact the availability of their mentors, their thesis committee members, and class sizes. **The University must continue to advocate for the need for more faculty, and future position requests should carefully consider the role and contributions that new hires will make to graduate programs.**

2. Building on the Success of Existing Graduate Programs

UW-Green Bay has graduate programs in Applied Leadership for Teaching and Learning, Management, Social Work, and Environmental Science & Policy. While these have served the region successfully, each program has the potential to be more competitive and meet the developing needs of the NEW North and larger community. In addition, better marketing and promotion of existing graduate programs via the UWGB website and other graduate search engines, such as gradschools.com, could significantly increase interest and enrollment. Any growth to UW-Green Bay graduate programs must be made only with the appropriate resources; class-room instructional load reductions for chairs of each graduate program, load credits for mentoring thesis and applied projects, teaching graduate courses, and coordinating

partnerships. **Creating budgets for each graduate program based on thesis or project-based fees, rather than course credits, based on shared research grant overhead obtained by graduate faculty, or based on a greater return of and accounting of graduate tuition are all possible means to provide graduate programs with at least limited budgets.**

A study comparing each UW-Green Bay graduate program to regional competitors has elucidated changes that can be made within the existing structure of the graduate programs. Similar public, private, and for-profit regional programs within a 100 mile radius of UW-Green Bay were considered. Each program is considered separately below.

a. Applied Leadership for Teaching and Learning (MSAL):

The Graduate Program in Education has enjoyed full cohorts of 18-20 students over the last several years, and the number of graduates over the last ten years has led all UW-Green Bay graduate programs. However, the future of incentives for professional development opportunities for practicing PK-16 teachers is bleak, and this problem is larger than offering attractive graduate programs for practicing educators. The biggest challenge facing the MSAL program is the impact of the Governor's budget bill on pay incentives for practicing teachers. For larger numbers, a state-wide incentive program for educators will need to be built back into the state teacher compensation system. The collectively bargained incentive in salary compensation has been a key reason that teachers seek Master's degrees. If the Governor's bill passes, it will have an immediate negative impact on the numbers in the MSAL graduate program. There will, however, still be rich pockets of interest and need over the next several years, which fall into the following areas.

Future Growth Areas:

- Bilingual Teacher Education:
  The MSAL program has had a consistent flow of area second language teachers completing their degrees through the program. This follows the demographic trend in area schools.
- First Nation Studies Partnership:
  Over the past three years, the MSAL program has enjoyed a close partnership with UW-Green Bay's First Nation Studies. The numbers of native American candidates has been consistent and growing.
- Creating an EdD Degree for Educators:
  There has been a largely untapped pool of educators who would be interested in earning an EdD in Education, with a specialization in administrative certification. If this degree were to be offered at UW-Green Bay, we would get good enrollment in an off campus cohort model in the region.
- Environmental Education:
  This collaboration between MSAL and ES&P graduate programs is described under the ES&P program. Resources and development of the program would be shared between the two graduate programs.
- Exploring On-Line Delivery:

The MSAL program needs to more fully develop on-line delivery of courses to meet the needs of working teachers.

b. Environmental Science & Policy (ES&P):

As a thesis based program, the ES&P program is close to or already at capacity in terms of the number of students that the available active faculty can mentor. However, there is potential for a non-thesis based science master's program, participation in a SMGT sustainability Master's Program in cooperation with UW-Extension and other partner UW-System programs, and partnering with the Applied Leadership for Teaching and Learning graduate program to create an environmental education emphasis. This array of programs would offer a greater range of opportunities to potential students, making UWGB more competitive both regionally and nationally. Each of these is described below.

Future Growth Areas:

- Collaborative SMGT Master's of Sustainable Leadership:

  A Master's of Sustainability Management (SMGT), described in detail below, has been proposed by UW-Extension and individual UW-System campuses. ES&P faculty have the opportunity to contribute to this program by teaching the core courses listed below, teaching elective courses, and participating on Capstone projects. Admission requires a minimum 3.0 GPA and has the same prerequisites as the existing SMGT: BS degree, some economics, and possibly others to be determined. Students with a GPA between 2.75 and 3.0 may be considered under a probationary period. Tuition will be $650 per credit hour pending budget model. This program is to be operated and funded by UW-Extension, with tuition revenue paid to extension. Profits will be shared between Outreach/Extension and participating campuses. It is anticipated that the program will not be profitable until after the 2nd year. UW-Extension will provide $25,000 for a program director, $5000 for new course development, and $7500 + fringe per course offered. Students may take courses on-line from any participating campus and may chose from which campus they will complete the capstone project and receive the MS degree.

  While this opportunity is in the development stage, it would be desirable for students in the ES&P Master's program to be allowed to take SMGT program courses for graduate credit toward their ES&P degree. Additionally, some ES&P graduate-level courses could fulfill the 6 elective credits for the SMGT program. This will create a wider variety of courses for both sets of students, and in return, is anticipated to increase graduate course enrollments. The existing Emergency Management Certificate program offered by UW-Green Bay Extension/Adult Degree has established a precedent for cooperation between Extension/Adult Degree and ES&P. ES&P students are permitted to take any of the Emergency Management certificate program courses for graduate credit toward their degree.

  The proposed SMGT program has a core curriculum of 36 credits, which will be offered on-line through participating campuses. The proposed core courses are:

  1. Advanced Sustainable Systems Thinking

2. Applied Research Data Analysis and the Triple Bottom Line
3. Geopolitical Systems – Decision Making for Sustainability on the Local, State and National Level
4. The Natural Environment
5. Economics of Sustainability
6. The Built Environment
7. Policy/Law and Ethics of Sustainability
8. One of these three course titles

a. Sustainable Organizations
b. Triple Bottom Line Organizations
c. Transforming Organizations

9. Electives: 2 three credit courses
10. Capstone: 6 credits

Capstone (in lieu of a thesis)

Students will present research proposals before beginning the capstone.
Faculty committee reviews proposals.
Students conduct research during one semester and then write or implement their project during the second semester.
Potential projects include research papers, projects, videos, multi-media presentations, etc.
Faculty committee reviews final projects and assigns grades.

- Non-thesis based MA program:

The National Science Foundation has documented a demand for Professional Science Master's programs that produce graduates with knowledge and skills in both the fundamental sciences and principles of business and economics (NRC 2008). The ES&P program, in cooperation with EMBI (Environmental Management and Business Institute) and the Master's in Management Program is poised to offer such a program. The ES&P program has recently explored this option and has some initial planning in place. A non-thesis Master of Arts in Environmental Science would be a new degree at UWGB, so an Entitlement would have to be obtained through UW System. Currently, no other UW System schools offer such a program.

The present ES&P program with selected courses from the Master's in Management program has the resources to offer a non-thesis Master's of Arts. Students in the MA program would take courses from the same array as ES&P MS students. An emphasis in Environmental Business, which includes courses in management, economics and accounting, has recently been initiated by the ES&P program and would support exactly the type of science Master's proposed by NSF. If UWGB participated in the collaborative SMGT program proposed above, those courses could also be applied toward the MA degree, again increasing demand for these courses and broadening curricula offerings for students.

- Environmental Education Emphasis:

The ES&P program partnered with the Applied Leadership for Teaching and Learning (MSAL) is well positioned to offer an MS degree in Environmental Education

at UW-Green Bay. UW-Stevens Point's College of Natural Resources Master's Program offers an Extended Master of Science in Environmental Education for K-12 teachers. A program at UW-Green Bay would be a closer resource for the many K-12 educators of this region seeking to further their expertise in environmental science education. In addition, because UW-Green Bay already has strong undergraduate and graduate programs in both education and environmental science, including Broadfield Science and science education, and several faculty members already participate in both graduate programs, we could create a highly competitive degree housed in the ES&P program. While such a program would require resources for planning, development and design, initial dialogue between the two programs has indicated strong support. This program would most likely be a non-thesis MA degree emphasis under the proposed new Entitlement described above. The needs of working teachers would best be met by on-line, evening, weekend and summer course delivery where appropriate.

As an initial model, UWGB could start with the UW-Stevens Point program description;

"The mission of the Master of Science in Natural Resources/Environmental Education for Elementary and Secondary Teachers Program is to initiate and facilitate the development, dissemination, implementation, and evaluation of a broad professional development graduate program to serve K-12 teachers. Candidates generally complete their Program of Study in three years, participating in on-line coursework in Fall and Spring with hands-on face-to-face coursework in Summer (one and two week sessions)."

c. Management:

UW-Green Bay's Master's in Management program has historically enrolled between thirty and forty students, many of who are part-time employed adult learners. Between 2009 and 2010, the program graduated nine students. Within a 1.5 hour driving radius from Green Bay there are several competing MS programs in management and business administration. UW-Oshkosh, Lakeland College in Sheboygan, and Marian University in Fond du Lac are the three most prominent of these (Figure 7). Between these three and Silver Lake College, 333 MS degrees were granted in the same period 2009 to 2010. With fewer than 3% of regional MS degrees in business, management, and marketing fields during the study period, it is clear that UW-Green Bay has fallen behind.

A brief review of the above listed competitors makes clear some fundamental design and delivery differences between UW-Green Bay and its competitors. This includes, and will be described in greater detail below, higher education accreditation, both off-site and on-line program delivery, and connection to the business community. With the proper resources in terms of faculty resources to offer courses via different delivery options, mentor a greater number of students through the required professional project, and cultivate relationships with the business community, the program has the potential to capture a greater number of students. However, the most important step that the program needs resources to achieve is appropriate academic accreditation.

Future Growth Areas:

- Higher Education Accreditation:
  The MBA program offered by UW-Oshkosh is the only Northeast Wisconsin program accredited by AACSB, and the Lakeland College MBA program is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools (NCA). Accreditation is one important factor that students consider when selecting a graduate institution and that prospective employers of graduates also look for in hiring. UW-Green Bay's Master's in Management Program must be given the resources and support to gain accreditation to be competitive with these institutions.

- Alternative Program Delivery:
  Regional competitors all offer courses via in-class, on-line or blend-education delivery. In addition, and probably more importantly, Marian University has a Green Bay site at the Northeast Wisconsin Technical College, UW-Oshkosh has an MBA education center in Green Bay supported by corporate sponsorship from Schneider National, Ameriprise Home and Auto, Citizens Bank, and donations from Krueger International (KI) and NSight Telservices. UW-Oshkosh advertises that this program adds to the economic development of downtown Green Bay by providing evening on-site classes in the only AACSB accredited MBA program in Northeast and Central Wisconsin. Lakeland College also has on-sight centers in Green Bay, the Fox Cities, and Sheboygan at which students may earn an accredited MBA. Hence, residents of Green Bay may earn an MBA from UW-Green Bay's three primary competitors without leaving Green Bay. They may take courses at either an on-sight center or via on-line distance education options. UW-Green Bay must have the resources to, at the very least, offer on-line and alternative delivery courses to compete.

- Relationships with the Business Community:
  The many sponsors of UW-Oshkosh's Green Bay center demonstrate its connectivity to the local business community. UW-Green Bay's Master's in Management Program would also benefit from greater connectivity to the business community. Greater involvement in the Environmental Management and Business Institute (EMBI) on campus should provide exactly these relationships. Steps to integrate the Management program with EMBI have already been initiated.

d. Social Work:

UW-Green Bay and UW-Oshkosh have a collaborative Master's in Social Work program that has no close regional competitors. Students in the program may take coursework at either institution, and while the program first relies on student preference, half of all incoming students are officially assigned to UW-Oshkosh and half to UW-Green Bay. Thus, student enrollment at the two participating campuses is carefully balanced, and as a result both UW-Green Bay and UW-Oshkosh each graduate 50% of MSW students. Pending additional instructional resources, the MS Social Work program could grow by offering some part of the program off campus, or by identifying and admitting a larger cohort group.

Future Growth Areas:

- Off Campus Program Opportunities:

  The Social Work graduate program may have opportunities to offer some part of the program off-campus, if a large enough student cohort within one geographical area could be identified. This cohort would need to be large enough to make this an economically feasible effort, but small enough so that the cohort could be effectively integrated into the existing program as they complete their course work. Last year, the program conducted an assessment of opportunities in the Wausau area and found that the potential group would be small – about 5 students. Social Work plans to continue exploring these opportunities. Because some on-line courses are already offered, the use of this teaching methodology can be explored off-campus. One of the limitations that this strategy faces is the limited amount of time imposed by the accrediting body within which students must complete the entire program. Thus, it would not be possible for students to enroll in one or two courses over an extended period of time.

- New Student Cohort Group:

  A larger project for Social Work would be to consider identifying and admitting a new student cohort group. The program has a large number of applicants who are not admitted to the program, but who may be eligible for admission if there were additional resources for teaching them and placing them in field agencies. Additional time to examine this option and to insure its feasibility in the region, where most graduates remain, would be required. This option would also require additional institutional resources.

3. Resources:

As is established in this document, the existing graduate programs at UW-Green Bay have the capability to grow and to offer more programs and options to serve students. However, none of these recommendations can be carried out successfully without the necessary resources. **The structure of the University that creates competition between the graduate and undergraduate programs for the same, already inadequate, pool of resources must be changed. Graduate programs at the very least need operating budgets or a centralized administration structure focused on graduate program growth. Faculty resources must be increased to carry out these recommendations and faculty must be rewarded for and adequately compensated for performing the administrative duties associated with running the programs, teaching graduate classes, and serving on thesis or professional project committees.** UW-Green Bay needs to market its programs to the University community, to the Northeast Wisconsin community, and to national and international communities. Even in the city of Green Bay, one can see advertisements for our competitors programs, while most citizens are unaware that their own university offers similar opportunities in graduate education. **We have excellent programs staffed with outstanding faculty. We just need to share that information via a sustained marketing effort.**

IV. Structural Overview of Current Graduate Studies at UW-Green Bay:

A. General Funding Structure: Tuition Revenue Targets:

The University of Wisconsin System sets a Tuition Revenue Target for all UW-System campuses; while this value remains generally fixed, slight adjustments are made from year-to-year to reflect changes in tuition price. For the 2010 to 2011 academic year, UW-Green Bay had an approximate Tuition Revenue Target of $25 million dollars. **Revenue Targets do not discriminate between revenue generated from graduate or undergraduate student tuition.** Upon collection of tuition dollars at UW-Green Bay, tuition funds are sent to the State of Wisconsin, which then returns General Program Revenue (GPR) funds to UW-Green Bay. GPR funds include the original funds raised through direct tuition (~$25 million) plus an additional state tax-dollar match (~$25 million for the 2010-2011 academic year). Any Tuition Revenue generated by UW-Green Bay in excess of their Revenue Target is returned to UW-Green Bay without additional tax-dollar match. Revenue generated in excess of Revenue Targets allows UW-Green Bay to carryover these funds on a one time basis. Due to uncertainty associated with this revenue stream these funds have generally been used for supply and expense items or capital purchases, rather than for adding faculty lines to support specific program growth. Should UW-Green Bay exceed their Revenue Target for several consecutive years, UW-Green Bay can submit a request to UW-System to have the base budget increased. The net effect would be to increase the base budget while also increasing the revenue target by a corresponding amount. However, the University would not necessarily receive additional position count to hire more professors. The University could submit a separate request to have position counts increased. **It is primarily through increasing UW-Green Bay's Revenue Target (or GPR base funding) that new faculty lines have historically been added to support growing programs. Clearly there are additional limitations set on program expansion by the availability of approved full-time equivalent employees for UW-Green Bay by the UW-System.**

While it may seem a simple step to calculate the average number of full time equivalent (FTE) students needed to meet Tuition Revenue Targets, this is not the case, as many tuition exemptions currently alter the revenue generated per FTE. For example, tuition generated through the Adult Degree Program does not contribute toward Tuition Revenue Targets, and military veterans are exempt from paying tuition. Based on past numbers, UW-Green Bay sets a FTE goal of 4,808 students; this number has previously surpassed UW-Green Bay's Tuition Revenue Target, providing both full GPR funds and a healthy addition of more tuition revenue dollars. With regard to UW-Green Bay, this point has two important implications. First, there is no mandatory enrollment targets set by UW-System, although clearly a decline in enrollment is politically unfavorable, even if revenue increases. Second, Tuition Revenue Targets are more easily met by students who pay more (Table 1). Full-time undergraduates require 12 credits per semester (24 per academic year), while full-time graduate students require 9 credits per semester (18 per academic year). **Thus, focusing simply on in-state students, a typical graduate student generates 23% more revenue than an undergraduate, while requiring 25% fewer credits per year. Put another way, graduate students pay 23% more for 2 fewer 3-credit classes per year, or 5 graduate students pay the tuition equivalent of 6 undergraduates, but require 54 fewer credit hours.** Thus, growth in graduate programs has the potential to increase revenue at a faster rate than classroom crowding, relative to revenue increases accomplished via growth in

undergraduate enrollment. These benefits would need to be balanced with the likely need to expand lower enrolled graduate courses. Out-of-state graduate tuition from domestic and international students would be particularly welcome, but currently seems limited in extent, perhaps due to a lack of investment in marketing (see Section III. Current UW-Green Bay Graduate Programs).

Table 1: Full-time tuition costs for in-state and out-of-state undergraduate and graduate students. Full-time status requires 12 credits per semester (24 per academic year) and 9 credits per semester (18 per academic year) for undergraduate and graduate students, respectively. Values do not include student segregated fees.

Student Group	Annual Full-time Tuition 2009-2010	Equivalent In-state Undergraduates
In-state Undergraduate	$5,662.72	1.00
Out-of-state Undergraduate	$13,235.68	2.34
In-state Graduate	$7004.88	1.24
Out-of-state Graduate	$18,088.00	2.96

Upon return of GPR funds to UW-Green Bay, revenue generated by graduate and undergraduate tuition is not currently re-partitioned to specifically support graduate and undergraduate programs. **Thus, there is currently no accounting system in place that designates the relative level of tuition-generated support targeted to return back to graduate verses undergraduate programs, and no graduate programs on the UW-Green Bay campus currently have Budgetary Unit status.** This places graduate programs in a similar structural position as many undergraduate disciplinary programs, for example, Biology, Chemistry, Women's and Gender Studies, and numerous others. **It could thus be argued that UW-Green Bay graduate programs, like undergraduate disciplinary programs, are currently mere extensions of Interdisciplinary Undergraduate Budgetary Units. This structural arrangement could in part contribute to the generally cited view that graduate programs at UW-Green Bay compete with, rather than complement, undergraduate education.** It may also provide one explanation for the low growth in graduate programs relative to undergraduate programs observed over the last twenty years (Figure 3), as the primary campus voice for existing graduate program appears to be that of the undergraduate budgetary units that house them. Facing identical funding challenges, Budgetary Chairs in units that have graduate programs must staff both undergraduate and graduate programs, while those units lacking graduate programs need only staff undergraduate courses. **While the lack of budgetary unit status for graduate programs may weaken the campus voice of graduate programs, this structural situation is quite common for many progressive, and successful graduate programs (http://www.units.muohio.edu/aisorg/Master's/index-states.shtml), and these challenges therefore do not appear unique to UW-Green Bay.** As long as our current and future graduate programs continue to reflect the interdisciplinary nature of our mission statement, the challenges of funding and staffing interdisciplinary programs is likely to remain. **At a minimum, a prudent step towards emphasizing**

graduate programs at UW-Green Bay appears to be the re-identification and directed appropriation of graduate tuition dollars upon their return to UW-Green Bay. In this manner, departments supporting graduate programs could potentially receive some financial benefit, or additional support, for housing graduate programs; in the current format departments housing graduate programs appear to only receive greater staffing pressures. In tandem with this approach, **the Graduate Task Force recommends that existing graduate programs be tasked to define the amount of graduate faculty workload needed to run vibrant graduate programs.** These estimates should include a minimum and maximum total program load based on target student enrollment ranges. Calculated graduate load should include thesis/professional project supervision, thesis committee work, graduate course instruction, and effort for graduate student research support through grant solicitation. The load accounting for predominantly graduate enrolled courses should not be the same as that for undergraduate courses.

B. Current Dedicated Graduate Studies Budget:

The 2010-2011 budget dedicated to graduate studies totals $139,362 (Table 2), but notably does not include instructional costs covered by participating undergraduate budgetary units. The largest single expense is for the eight half-time equivalent Teaching Assistantships available for the Environmental Science & Policy Graduate Program. These eight teaching assistantships account for 64.6% of the total graduate budget. However, all M.S. students on Teaching Assistantships must maintain full-time enrollment status, pay in-state tuition, and teach 2 to 3 courses per semester. Based on an annual in-state graduate tuition rate of $7,004 (Table 1) these 8 students generate direct tuition to UW-Green Bay equal to $56,039 dollars per year, plus any GPR funds allocated to UW-Green Bay by the state to support those students. The same eight students cost UW-Green Bay $90,032 in direct salary (current TA's are paid a mere $11,254 per year), plus $41,595 (@ 46.2% fringe benefits) or roughly $131,627 per year. **Existing TA's cover instruction for 96 to 144 contact hours per year (4 to 6 three-contact hour laboratory sections per year per TA, times 8 TA's) at an approximate net cost of only $75,588 ((salary + benefits) – (student tuition)). However, even this figure is likely an overestimate of the direct instructional costs to the University for supporting TA's, as these students are also contributing toward the University's tuition target.**

Using fall 2010 enrollment data of 150 graduate students, and full-time tuition minus student segregated fees ($7,004), the graduate program currently generates in the neighborhood of $1,050,600 in direct student tuition, plus some component of state support as these students aid in meeting UW-Green Bay's tuition revenue targets, plus an additional $197,100 in student segregated fees. **In contrast, the graduate program dedicated budget from 102 funds for the 2010-2011 academic year amounts to about 13% of the direct tuition payments of graduate students (which also excludes student segregated fees paid to UW-Green bay). Excluding the cost of TA's, which contribute significantly to meeting University staffing needs, the graduate studies budget at UW-Green Bay amounts to roughly 4.7% of direct tuition payments by graduate students.** Again, it is important to note that these estimates do not include the costs of graduate instruction, as these costs are carried by undergraduate budgetary units. Supplies and expense costs are budgeted at $7,751 for all four current graduate programs. **Notably absent are any dedicated funds available for marketing and advertising.** A lack of marketing support

was noted as one of the fundamental challenges facing growth of the current graduate programs (see Section III. Current UW-Green Bay Graduate Programs).

Table 2. Itemized budget from fund 102 dedicated for Graduate Studies at the University of Wisconsin-Green Bay for the 2010-2011academic year. Values provided by T. Seawall.

Item	Budget Allotment
Graduate Assistantships (4 FTE; ES&P)	$90,036
Student Status Examiner	$39,824
Student Hourly	$1,751
Supplies & Expenses	$7,751
Total	$139,362

C. Graduate Tuition Pricing:

Rules for establishing graduate tuition appear to be in a state of UW-System policy change. Recent changes in the ability of individual campuses to more easily require campus-specific undergraduate tuition differentials have prompted a similar request at the graduate level. The UW-System Pricing of Graduate Programs and Nonresident Tuition Working Group was charged in September 2010 to investigate the options available and recommendations for flexible pricing of graduate tuition throughout the UW-System. The working group, which included UW-Green Bay's Tomas Maki, recommended the adoption of specific Graduate Pricing Guidelines, which builds upon existing Service-Based Pricing Guidelines and expands the ability of campuses to respond to demand. **Graduate Pricing Guidelines differ from Service-Based Pricing Guidelines in that a graduate college or school may have only one augmented rate.** "Augmented tuition rates" differentiate tuition rates established under the Graduate Pricing Guideline from those base levels established by the UW-System Board of Regents. These rates apply to all graduate programs offered on or off-of campus, through traditional, hybrid, or distance learning, and for graduate-level certificate programs offered for credits." To our knowledge these recommendations are not yet formally approved. Augmented tuition rates are limited to one per college, but need not be applied to all graduate programs within that college. Thus, this proposal aims to reduce the proliferation of graduate tuition rates within a college, but provides colleges with the flexibility needed to require increased tuition for specific programs when appropriate. All augmented tuition proposal should be higher than the standard tuition rate set by the Board of Regents, must remain below the Board-approved tuition plateau, must include a market-based analysis justifying the proposed rate, include past or anticipated enrollment numbers, include a description of how the additional funds will be used, and be recommended by the chancellor to the Assistant Vice President for Budget and Planning for approval by the UW-System President.

Relatively high Student Segregated fees of $657 per semester, or $1,314 per year, at the University of Wisconsin-Green Bay appear to provide an additional challenge for offering competitive graduate tuition prices. In real terms, student segregated fees add an additional 19% to resident graduate tuition, or 8% to non-resident tuition costs. In response, current and past graduate students have raised strong concerns that while paying equal student segregated rates as undergraduates, they receive little in return, as most student organizations are geared toward undergraduates and many graduate students are non-traditional, and rarely utilize campus resources beyond computer programs and the library. Based on the number of non-traditional students active in graduate studies, there appears strong justification for student opposition to paying full Student Segregated Fees. **Addressing student segregated fees alone, if possible, would reduce graduate enrollment costs by upwards of 19% per semester for resident graduate students, without reducing the tuition dollars generated by graduate programs. These changes appear sure to improve our ability to attract graduate students to our programs.**

D. A Role for University Advancement in Graduate Studies:

While the ability to add additional faculty lines through traditional GPR-based means may be constrained by system-level limitations, one potential mechanism by which graduate studies can be advanced is through a greater cooperation between existing and desired graduate programs and University Advancement. As a case in point, in the last three to four years support from one extremely generous donor has provided the Environmental Science & Policy Graduate program with four additional new assistantships. **As with undergraduate programs, competitive scholarships and assistantships are essential for attracting top students to graduate programs, and reciprocally high quality students are required to build and maintain highly respected programs.** The new assistantships within the ES&P Program have helped reverse declines in the total number of graduate assistantships available to attract students to the program. While it was difficult to find data that definitively separated GPR funded from grant funded assistantships, it is clear that UW-Green Bay has seen a significant erosion in the total number of assistantships available. For example, in 1991, there were 13 assistantships, 15 in 1995, 21.5 in 2000, 17 in 2005, and only 10 today. **What these recently added assistantships did not address is the simultaneous decline in the relative earnings (salary relative to tuition costs), and thus competitiveness of available graduate assistantships.** Since 1995, total graduate student tuition costs (tuition plus student segregated fees) have grown by 266% from roughly $3,124 per year to our current rate of $8,318 per year. In contrast, salaries for our assistantships have only increased by 149%, from $7,563 in 1995 to $11,254 per year today. At today's salary rates, after paying tuition and segregated fees, our graduate assistants are left with $2,936 dollars to support themselves. **Thus, both the number and relative competitiveness of UW-Green Bay assistantships has seriously declined through time, and University Advancement seems a pragmatic means by which the University can attempt to improve this situation.** While most of these assistantships were historically associated with the ES&P program, all graduate programs seem sure to be boosted by the availability of assistantships for qualified and underrepresented students**. The graduate task force also sees no reason that similar endowed faculty positions within graduate programs could not also be sought by University Advancement.** In an identical manner, local business leaders and donors could also be courted for the political support and financial backing needed to establish new or expand existing graduate programs at UW-Green Bay. Clearly, donors in our region must have interest in training not only entry-level

undergraduates, but also higher-skilled, graduate trained employees. **A top priority recommendation by the Graduate Task Force is that graduate program growth must be coordinated with University Advancement, and that a greater-level of communication between program needs and University Advancement should be developed to facilitate growth.** Perhaps the newly established University of Wisconsin-Green Bay Foundation could serve as an impetus for our University to adopt a graduate program growth model more reflective of the donor support sought by private universities, rather than relying upon acquiring seemingly elusive state GPR funded faculty lines.

E. Coordinating Graduate Programs with the Institute for Research:

One clear product of graduate studies programs should be a greater emphasis on scholarly productivity, both through granting and scholarly publication. These activities are both essential to increase or maintain the prestige of offered graduate programs, and to generate the graduate assistantships needed to attract and support high quality students. While all graduate programs will generate revenue for the University through graduate student tuition payments, significant inter-program differences exist in current and potential revenue generation via enrollment growth and enhanced granting activity. For this reason, **the Graduate Task Force recommends that all financial evaluations of graduate programs consider not only tuition revenue, but also the value of equipment and indirect dollars generated through externally funded grants.** Many faculty have expressed a potential for greater granting activities, but feel constrained by the amount of time available to pursue available funding sources. To date, the Graduate Task Force is unaware of any evaluations that have attempted to identify the true value of the granting associated specifically with graduate faculty and graduate programs via the purchasing of equipment and the generation of indirect overhead dollars for UW-Green Bay. **A strong coordination between graduate programs and the Institute for Research should exist to facilitate UW-Green Bay's granting potential.** However, without differential load accounting, or clearly defined granting expectations associated with Graduate Faculty Status, it is unlikely that significant growth in these areas will occur.

F. A Need to Define Graduate Faculty Status:

The graduate taskforce was unable to obtain a concrete definition of the responsibilities and expectations associated with a graduate faculty appointment at the University of Wisconsin-Green Bay and identified a notable absence of differences in compensation, classroom teaching load, granting expectations, or scholarly output expectations between graduate and non-graduate faculty at UW-Green Bay. According to the University of Wisconsin-Green Bay Faculty Handbook, Graduate Faculty membership is defined as, "The faculty of a graduate program shall consist of those UW-Green Bay faculty members holding professorial rank and Lecturers with faculty status who have been appointed to that program by the Provost/Vice Chancellor for Academic Affairs on recommendation of the Dean of Professional and Graduate Studies and the graduate program executive committee. A faculty member may have a split appointment or assignment with another graduate program but may vote in only one program (Faculty Handbook Section 53.12; http://www.uwgb.edu/sofas/rules/facultyhandbook.pdf)."

Graduate faculty at the University of Wisconsin-Green Bay teach the same number of classroom-contact hours as non-graduate faculty, despite contributing significant instructional time mentoring graduate student projects, and designing, funding and advising graduate theses and projects. Graduate faculty also invest significant time in the writing of extramurally funded grants to support research projects and graduate students (currently common in the Environmental Science & Policy Graduate Program), thereby generating overhead dollars to UW-Green Bay. Despite these extra responsibilities graduate faculty receive no clear salary benefits, nor receive altered classroom instructional load reflecting their added commitments. This is frustrating for all graduate faculty, but appears particularly so for faculty overseeing graduate theses and projects, as graduate students pay tuition for these graduate credits, yet this time commitment remains unrecognized by the University as official instructional load. Other UW-System schools recognize differences in faculty interests and strengths by differentiating load between those active in both undergraduate and graduate-level research and education and those focused on undergraduate education alone. Additionally, other comparable UW schools recognize the added faculty investment needed to prepare quality graduate courses by acknowledging a greater load per credit for graduate, than undergraduate courses. For example, at UW-River Falls, "Faculty teaching 500-,600-, or 700-level courses with at least 50% graduate enrollment will receive a four (4)-credit load for each section of three (3) credits (Section 8.1.1 Load; http://www2.uwrf.edu/faculty_senate/handbook/chapter8-1.htm#C811)." This seems only reasonable, as graduate courses also generate greater revenue per contact hour for the University. **The graduate task force concludes that a lack of differential workloads and incentives for participating in graduate programs very likely contributes to stagnant growth in graduate studies and significantly reduces the revenue generation through extramural granting. A top priority recommendation by the Graduate Task Force is that graduate faculty responsibilities, evaluation mechanisms, and incentives be clearly defined and differentiated from those of non-graduate faculty at UW-Green Bay.**

One potential mechanism by which UW-Green Bay could concretely define Graduate Faculty Status and couple the associated expectations to appropriate incentive programs would be to incorporate Graduate Faculty Status more formally into faculty merit evaluations (Faculty Handbook; section 3.10) and faculty Professional Development Proposals (PDP; Faculty Handbook; Guidelines for Tenured Faculty Review and Development). **Under this framework, each graduate program would first define expectations for meeting graduate faculty status in their specific graduate program; thus allowing expectations to very among programs and openly acknowledging real differences among graduate programs.** These expectations should include expected contributions to graduate project oversight, thesis committee service, granting and scholarly output, and graduate instruction for the proposed time period. **Second, faculty would be required to clearly define their expected time contribution to their associated graduate programs.** Non-tenured faculty would like-wise develop a similar set of expectations at the start of their positions in collaboration with the Executive Committee of their Budgetary Unit. **In this manner faculty could propose varying levels of contribution to graduate programs.** For example, full graduate faculty status would require participation at the full level of expectation defined by each specific graduate program, while a 50% graduate faculty appointment would require meeting only half of the expectations for thesis oversight, granting, scholarly output, or graduate instruction, etc. **To work, graduate faculty status must also be associated with incentives, either via altered classroom teaching loads, or greater**

compensation. An important step at UW-Green Bay would be to acknowledge the need for differential workloads among faculty, providing faculty with the opportunity to best capitalize on their primary interests and talents, thereby also best serving the University by promoting and encouraging faculty talents, rather than retaining the current one-shoe fits all approach to faculty expectations. Professional Development Proposals must currently be prepared at a minimum of every five years, and if shortened to a four year rotation within departments supporting graduate programs, could be tied to the merit process. **In this manner, tenured faculty merit could be linked to reappointment of Graduate Faculty Status.** Faculty failing to meet expectations could be revoked of their Graduate Faculty Status, and the incentives associated with this designation. **To work, this proposal would also require a greater flexibility of expectations for non-graduate faculty. For example, those faculty whose talents and interests are best highlighted in the classroom could agree to a higher classroom instructional load in exchange for reduced expectations in scholarly output.** The significance of this change is that individual faculty may benefit from stronger merit reviews, and UW-Green Bay could benefit from greater flexibility for promoting graduate programs and granting revenue. This proposal would also require greater coordination between graduate programs and budgetary units during the merit process via the evaluation of Graduate Faculty Status renewals by each Graduate Program during the merit period.

G. Potential University Structural Changes:

What is clear from this report is that graduate programs currently lack the campus voice and internal political influence needed to successfully compete for the limited resources needed to strengthen and grow graduate programs within the University. Further, and equally important, is the apparent inability for graduate programs to voice their needs in a manner adequate to initiate an institutional response, irrespective of monetary considerations. This seems best documented by the concerns raised by the Environmental Science & Policy Graduate Program in the 1995-1996 UW-Green Bay Comprehensive Academic Program Evaluation (CAPE). In essence, the same basic problems identified in CAPE 15 years ago, remain today. Within CAPE, the chapter focused on the Environmental Science & Policy Graduate Program states within section 5. Most Compelling Needs,

> "1) Faculty morale and willingness to provide thesis supervision is undermined due to the lack of funding for thesis reassignments to compensate for increased workload; 2) the graduate program and its coordinator need a voice in decisions about the hiring of new faculty (expansion) and making join appointments when replacing retiring/departing faculty who have been a significant component of graduate programs ...; 3) at least a minimal direct budget line for S&E and clerical support; 4) greater control in decisions about course offerings for the graduate program is needed, currently there is no graduate program related budgetary lines of authority; and 5) at least a verbal, if not financial, recognition that graduate faculty generally contribute significant personal time to the support of the graduate program (approximately 20% graduate program credits are uncompensated thesis, intern, or independent study credits).

> A particular shortcoming of the graduate programs as they are structured at UW-Green Bay is that neither the Administrative Science nor Environmental Science & Policy graduate program coordinators are considered to be department heads and are, therefore, left out of the campus decision-making loops and monthly department head meetings. Further, it would seem logical for all of the UW-Green Bay campus graduate programs (full-fledged UW-Green Bay and cooperative campus programs) to report to campus administration through the Associate Dean of Graduate Studies. However, this does not occur."

This evidence, coupled with the low graduate program growth highlighted in Section II, provides ample evidence that Graduate Studies have not received significant University attention for a long time. **It is for this reason, that the Graduate Task Force recommends a critical need to thoroughly evaluate the current position of graduate programs within the University of Wisconsin-Green Bay's structural organization, and to consider the associated structural changes needed to bring about a greater independence of graduate programs from undergraduate programs, and increase the internal political strength of graduate programs at UW-Green Bay.**

Proposing structural changes at the University level is a major undertaking, and an issue that would require much more time than was available to this Task Force. Irrespective, below we provide one suggested model for a new organizational structure to complement the programmatic and financial change proposals suggested within the Graduate Task Force Report. Without a structural change to anchor and embedded such proposals at the university fabric, the proposed programmatic and financial changes have a high risk of failure, or at best, a short term of success. **The purpose of the below structural proposal is to start such a discussion; it is by no means a comprehensive and complete framework.**

The proposal includes two new institutions: the Graduate School and the Graduate Council, and support for a Graduate Student Association. All are currently lacking from UWGB structure and as evidence by this Task Force Report, are badly needed. We do acknowledge that similar, but not equivalent bodies already exist at UW-Green Bay, in the form of the Graduate Faculty Board of Advisors, and the Graduate Student Union. The proposed Graduate School will provide an organizational home for current and future graduate programs, and will make it easier to advance, promote, manage and drive their academic excellence. The proposed Graduate Council will provide for a stable faculty venue to support such initiatives. The Graduate Student organization will complement such effort and provide for a platform to represent the interests of our graduate students.

The responsibilities of the Graduate School include:

- Development of curriculum and new graduate programs in coordination with the appropriate program.
- Establishment of a Development Program.
- Recruitment of graduate students, with special prominence on students from under-represented groups, to establish and maintain a diverse graduate student body.
- Graduate admissions.
- Graduation and academic progress of graduate students.
- Graduate assistantship and fellowship (when appropriate) administration.
- Graduate student development.

- Maintain a relationship with the Graduate Council.
- Maintain a relationship with the Graduate Student Association.
- Data and records management, and production of the Graduate Catalog.
- Maintenance of external relations – with other offices, such as Office of Research, University Registrar, University Libraries, Office of Information Technology. Serve as an advocate for graduate education and financial resources with internal and external constituencies.
- Facilitate the development of interdisciplinary programs and extramural consortia, for example provide oversight to graduate certificate programs.

The proposal should also outline the resources needed to support this institution, for example: a Dean, annual budget, etc.

The responsibilities of the Graduate Council will include:

- Govern the Graduate School academic policies and campus-wide standards for overall administration of graduate programs.
- Provide for a forum for faculty to discuss, review and approve curricular matters in graduate programs.
- Approve new graduate programs and other educational policies related to graduate education.

The proposed council could consist of graduate faculty members elected by their colleges, the Graduate Student Association representative, and appointed ex-officio members of the faculty and administration.

V. Graduate Program Survey for Wisconsin and the Upper Peninsula:

A. Overview:

In the 2009 to 2010 academic year, the U.S. Department of Education reported that 9,792 students completed Master's degrees in Wisconsin and the Upper Peninsula of Michigan (Table 3). These degrees were distributed across 30 different 2-digit Classification of Instructional Program (CIP) code areas (http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55). CIP code areas organize Master's degrees in to simplified categories based on similar areas of focus. For example, all business, management, and related programs are tabulated within a single CIP category titled, "Business, Management, Marketing, and Related Support Services." **In the 2009 to 2010 academic year, over half of all Master's degrees were in the broad areas of Education and Business and roughly two thirds came from those two areas plus the Health Sciences (Table 4). Combining Engineering, Psychology and Public Administration, which includes Social Work, with Business, Education, and Health accounts for 75% of all awarded Master's degrees.** From 2009 to 2010, Wisconsin and UP Michigan schools produced Master's degrees in 159 different 4- or 6-digit CIP detail levels. The number of different detailed CIP codes generally represents the number of distinct Master's programs available. In total 44 institutions granted Master's degrees, of which ten of the forty-four schools (23%) have only a single Master's program. Over half of the 44 institutions (52%) have more programs than UW-Green Bay's four programs.

Table 3: Master's degrees awarded in Wisconsin and the Upper Peninsula of Michigan during the 2009 to 2010 academic year.

Institution type	Granting Institutions	Master's Granted	Total (%)
Michigan UP-public	3	316	3
Wisconsin–public	13	5599	57
Wisconsin – private	22	3762	39
Wisconsin – profit	6	115	1%
Totals	44	9,792	

B. Existing Graduate Programs within a 1.5 hour Drive of UW-Green Bay:

Assuming for now that most Master's degrees are obtained through on-campus instruction, which admittedly may be an assumption that does not hold true for all disciplines, there are currently only 6 institutions that grant Master's level degrees within a 1.5 hour drive of the UW-Green Bay Campus. In addition to UW-Green Bay, they include Bellin College (1 program at 0.25 hours distance), Saint Norbert College (2 programs at 0.42 hours distance), Silver Lake College (5 programs at 0.78 hours distance), UW-Oshkosh (13 programs at 1.25 hours distance), Lakeland College (3 programs at 1.27 hours distance), and Marian University (4 programs at 1.47 hours distance). It is of particular note, that these six institutions currently provide Master's-level degrees in only 9 of the 30 main CIP categories (Table 4). Extending the

driving distance to just under 2.0 hours includes Northland International University (3 programs at 1.65 hours distance), Concordia University-Wisconsin (19 programs at 1.87 hours distance), and UW-Stevens Point (8 programs at 1.95 hours distance), further increasing the available CIP categories from 9 to 14. Most of the new CIP additions were available through Concordia University-Wisconsin and the UW-Stevens Point. At around 2.0 hours travel distance from UW-Green Bay one begins to add the Milwaukee area Universities, with the addition of many new Master's-level programs. At this point we have not included the states of Illinois and Minnesota, and program-specific proposals will certainly need to consider expanding their analyses to these markets.

One measure of UW-Green Bay's current engagement in Graduate education is provided by a survey of the availability of programs in the six most popular areas of graduate studies (Education, Business, Health Science, Engineering, Psychology, and Public Administration) located within the 1.5 hour drive distance of UW-Green Bay's campus. As a reminder, these programs accounted for roughly 75% of all Master's-level degree granted in Wisconsin and the Upper Peninsula of Michigan in the 2009 academic year.

Education was the most popular Master's field, granting 3,303 degrees, or 30.7% of all Master's degrees in 2009 (Table 4). Twenty percent of these degrees were granted within a 1.5 hr drive distance, and UW-Green Bay's Applied Leadership for Teaching and Learning accounted for 1.8% of the degrees granted within the 1.5 hour drive radius (Table 4). Marion University granted the most degrees within this area, followed by UW-Oshkosh, and Lakeland College (Figure 6). UW-LaCrosse was the most prolific Master's Education program in the state (Figure 6).

Business was the second most popular Master's field, granting 2,413 degrees, or 24.6% of all Master's degrees in 2009 (Table 4). Fourteen percent of these degrees were granted within a 1.5 hr drive distance, and UW-Green Bay's Management Master's Program accounted for 2.7% of the degrees granted within the 1.5 hour drive radius (Table 4). Lakeland College and UW-Oshkosh granted the most degrees within this area (Figure 7). Cardinal Stritch University was the most prolific Master's Education program in the state (Figure 7).

Health Professions and Related Programs granted 990 Master's degrees in 2009-2010, or 10.1% of all Master's degrees in 2009 (Table 4). Five percent of these degrees were granted within a 1.5 hr drive distance, and UW-Green Bay's recent entitlement to develop a Master's in Nursing will contribute to this area (Table 4). Currently Belin College, UW-Oshkosh, and Marian University are all producing Health-related Master's degrees within 1.5 hours or UW-Green Bay (Figure 8). The University of Wisconsin-Madison is currently the most prolific Health-related Master's Education university in the state (Figure 8).

Engineering granted 649 Master's degrees in 2009-2010, or 6.6% of all Master's degrees in 2009 (Table 4). Despite our strong regional focus on manufacturing, there are currently no Master's granting programs related to Engineering with 1.5 hours of the UW-Green Bay campus (Figure 9). Once again, UW-Madison is currently the most prolific Engineering-related Master's Education program in the state (Figure 9).

Psychology granted 304 Master's degrees in 2009-2010, or 3.1% of all Master's degrees in 2009 (Table 4). Three percent of these degrees were granted within a 1.5 hr drive distance (Table 4). UW-Green Bay currently has no program contributing to this area, although the UW-Green Bay Psychology Department conducted an extensive survey in May of 2006 examining the potential demand for the initiation of a related program here at UW-Green Bay. The University of Wisconsin-Oshkosh is the only institution currently granting Psychology related Master's degrees within 1.5 hours of our campus (Table 4). The 2006 report concluded that while job outlook was not clear, the best opportunity for expansion exists in partnering with the existing Master's of Social Work to create a clinical track.

Public Administration and Social Service Professions granted 297 Master's degrees in 2009-2010, or 3.0% of all Master's degrees in 2009 (Table 4). Fifteen percent of these degrees were granted within a 1.5 hr drive distance, and UW-Green Bay's Master in Social Work accounted for 37.8% of the degrees granted within the 1.5 hour drive radius (Table 4). Currently only UW-Oshkosh and UW-Green Bay provide opportunities for Master's educations in social work within a 1.5 hours or UW-Green Bay; in fact they are part of the same collaborative Master's program.

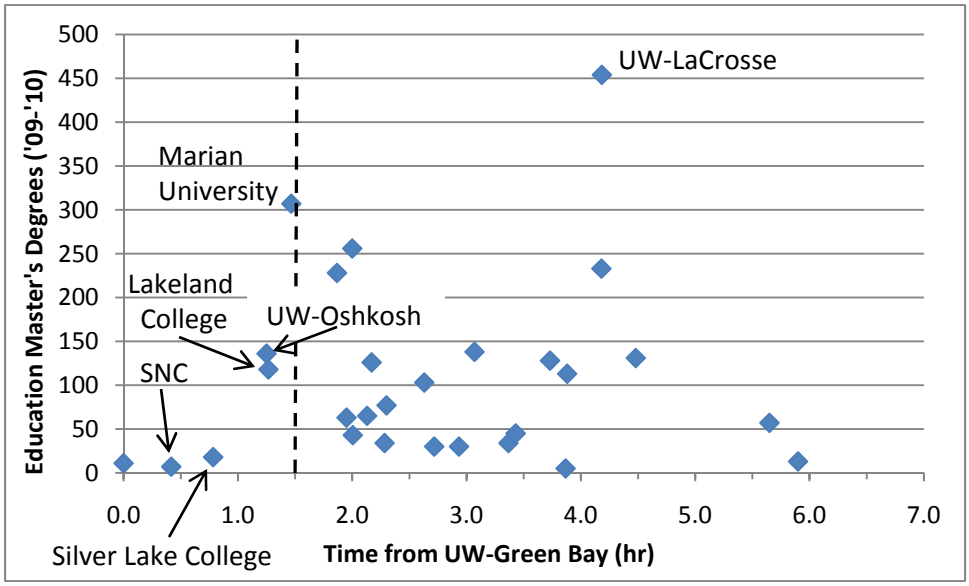

Figure 6: Master's level education programs in Wisconsin and the Upper Peninsula of Michigan. Data presents the number of Master's degrees awarded from each program during the 2009 to 2010 academic year as a function of distance from the University of Wisconsin-Green Bay Campus. Estimated travel time was obtained from Google Maps.

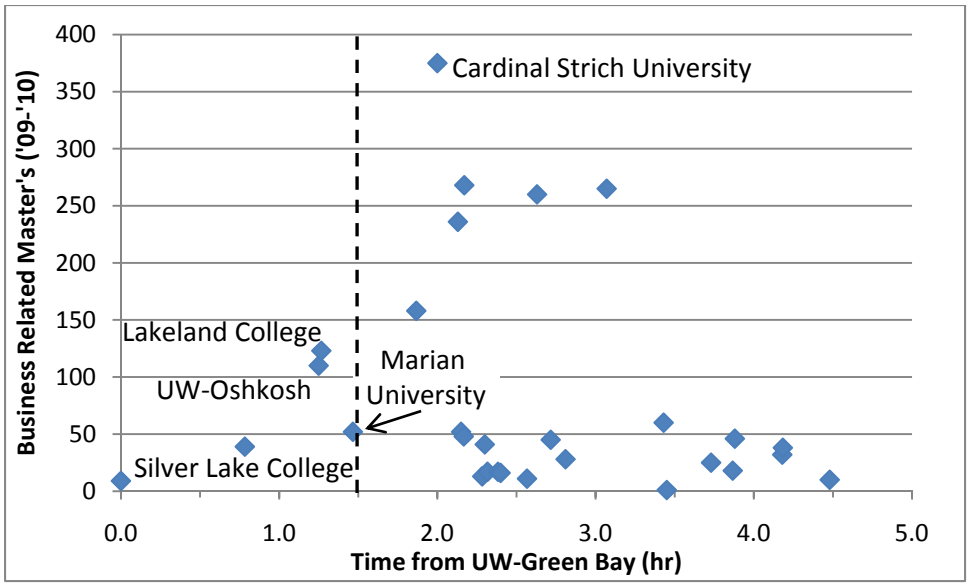

Figure 7: Master's level Business-related programs in Wisconsin and the Upper Peninsula of Michigan. Data presents the number of Master's degrees awarded from each program during the 2009 to 2010 academic year as a function of distance from the University of Wisconsin-Green Bay Campus. Estimated travel time was obtained from Google Maps.

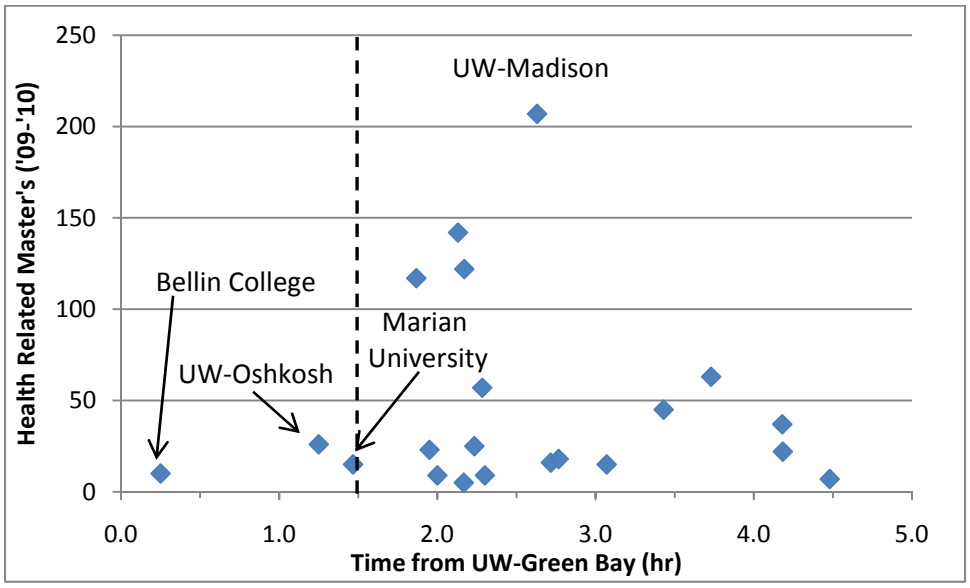

Figure 8: Master's level health-related programs in Wisconsin and the Upper Peninsula of Michigan. Data presents the number of Master's degrees awarded from each program during the 2009 to 2010 academic year as a function of distance from the University of Wisconsin-Green Bay Campus. Estimated travel time was obtained from Google Maps.

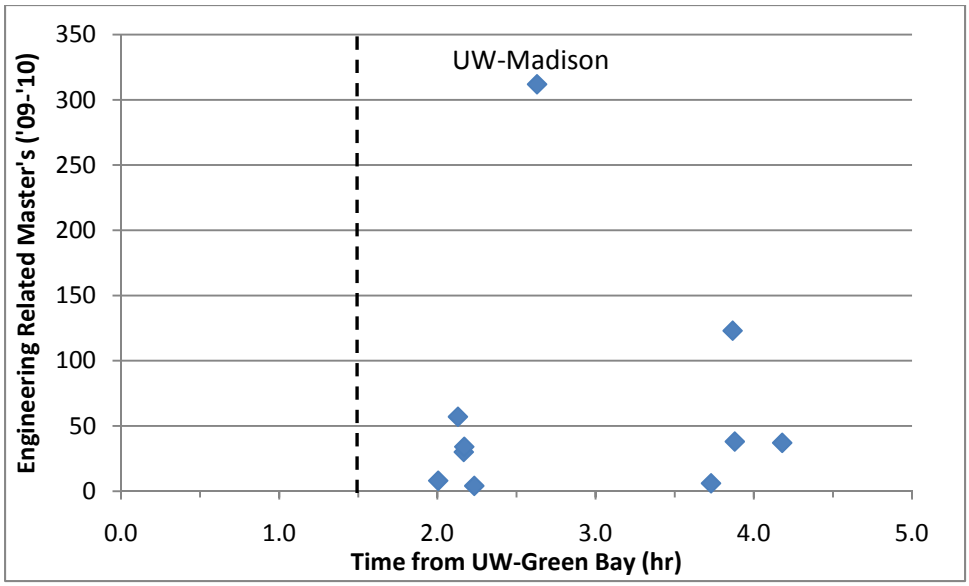

Figure 9: Master's level engineering-related programs in Wisconsin and the Upper Peninsula of Michigan. Data presents the number of Master's degrees awarded from each program during the 2009 to 2010 academic year as a function of distance from the University of Wisconsin-Green Bay Campus. Estimated travel time was obtained from Google Maps.

Table 4: Summary of Master's-level degrees granted from 2009 to 2010 within Wisconsin and the Upper Peninsula of Michigan. Master's programs follow CIP categories set by the US-Department of Education. Master's-level programs available within 1.5 hours drive from the University of Wisconsin-Green Bay (UW-GB), as determined using Google Maps, are shaded in grey.

CIP Category	Total Master's Granted	Master's Granted (% of total)	Granting Institutions	Granting Institutions within 1.5 hrs	Master's Granted within 1.5 hr	Master's Granted within 1.5 hr (% of Category)	UW-GB Master's Granted for Category	UW-GB Master's Granted (% of Category)	UW-GB Master's (% Granted within 1.5 hr)
Education	3003	30.7	28	6	597	19.9	11	0.4	1.8
Business, Management, Marketing, and Related Support Services	2413	24.6	29	5	333	13.8	9	0.4	2.7
Health Professions and Related Programs	990	10.1	21	3	51	5.2	0	0.0	0.0
Engineering	649	6.6	10	0	0	0.0	0	0.0	---
Psychology	304	3.1	15	1	9	3.0	0	0.0	0.0
Public Administration and Social Service Professions	297	3.0	8	2	45	15.2	17	5.7	37.8
Library Science	295	3.0	2	0	0	0.0	0	0.0	---
Social Sciences	218	2.2	4	0	0	0.0	0	0.0	---
Visual and Performing Arts	180	1.8	5	0	0	0.0	0	0.0	---
Biological and Biomedical Sciences	154	1.6	10	1	4	2.6	0	0.0	0.0
English Language and Literature/Letters	116	1.2	7	1	6	5.2	0	0.0	0.0
Theology and Religious Vocations	103	1.1	7	1	5	4.9	0	0.0	0.0
Parks, Recreation, Leisure and Fitness Studies	103	1.1	4	0	0	0.0	0	0.0	---
Computer and Information Sciences and Support Services	107	1.1	8	0	0	0.0	0	0.0	---
Physical Sciences	92	0.9	4	0	0	0.0	0	0.0	---
Foreign Languages Literatures and Linguistics	90	0.9	3	0	0	0.0	0	0.0	---
Communication Journalism and Related Programs	86	0.9	7	0	0	0.0	0	0.0	---
Natural Resources and Conservation	81	0.8	4	1	10	12.3	10	12.3	100.0

Table 4 continued: Summary of Master's-level degrees granted from 2009 to 2010 within Wisconsin and the Upper Peninsula of Michigan. Master's programs follow CIP categories set by US-Department of Education. Master's-level programs available within 1.5 hours drive from the University of Wisconsin-Green Bay (UW-GB), as determined using Google Maps, are shaded in grey.

CIP Category	Total Master's Granted	Master's Granted (% of total)	Granting Institutions	Granting Institutions within 1.5 hrs	Master's Granted within 1.5 hr	Master's Granted (% of Category)	UW-GB Master's Granted for Category	UW-GB Master's Granted (% of Category)	UW-GB Master's (% Granted within 1.5 hr)
Architecture and Related Services	77	0.8	2	0	0	0.0	0	0.0	---
History	72	0.7	5	0	0	0.0	0	0.0	---
Mathematics and Statistics	72	0.7	3	0	0	0.0	0	0.0	---
Legal Professions and Studies	47	0.5	2	0	0	0.0	0	0.0	---
Agriculture, Agriculture Operations, and Related Sciences	43	0.4	1	0	0	0.0	0	0.0	---
Philosophy and Religious Studies	43	0.4	5	0	0	0.0	0	0.0	---
Area Ethnic Cultural Gender and Group Studies	33	0.3	1	0	0	0.0	0	0.0	---
Engineering Technologies and Engineering-related Fields	30	0.3	2	0	0	0.0	0	0.0	---
Homeland Security, Law Enforcement, Firefighting and Related Protective Service	28	0.3	2	0	0	0.0	0	0.0	---
Family and Consumer Sciences/Human Sciences	27	0.3	4	0	0	0.0	0	0.0	---
Multi/Interdisciplinary Studies	26	0.3	4	0	0	0.0	0	0.0	---
Liberal Arts and Sciences General Studies and Humanities	13	0.1	2	0	0	0.0	0	0.0	---

VI. Recommendations for New Programs

A. Overview:

A university is a "primary source of knowledge creation and talent" (Florida, n.d.). Talented individuals are a critical resource in the rapidly changing economy. University education, especially at the graduate level, must advance students beyond "skills" training aimed at only plugging graduates into existing employment opportunities. A graduate education, while directed and specific to a field of study and even a professional industry, provides knowledge and abilities that empower graduates to not only acquire employment, but to be decision-makers to augment and drive their profession into new opportunities.

The process of recommending "new" graduate programs or even broad areas of graduate study that are viable in the existing job market and for this campus to undertake in a time of scarce resources is a difficult task. Growth occupations and trends, strengths and opportunities on the UW-Green Bay campus, and necessary resources are important considerations in identifying areas for new program development. Thus, the following data sources will be examined in this section: 1) occupational outlook data for the nation and Wisconsin, 2) UW System planning data for graduate programs, and 3) UW-Green Bay "pipeline" for graduate programs. This section concludes with general recommendations for new graduate programs at UW-Green Bay

B. Occupational Outlook Data:

Occupational growth areas can be considered by the rate of growth, or by the number of jobs created by growth. Using the Occupational Outlook Handbook (2010-11 edition), occupational projections data for 2008-18 are described for occupations in general and by education/ training category.

1. General Growth Occupations:

When considering occupations with the fastest growth, among the 20 fastest growing occupations, half are related to healthcare. Top healthcare occupations include home health aides, physician assistants, athletic trainers, and physical therapist aides. **A second-fastest-growing occupation is the computer sector (i.e., network systems and data communication analysts).** Many of these occupations require bachelor's education or less. The only occupation on the list of the 20 fastest growing occupations requiring a Master's degree is physician assistant. When considering occupations with the largest numerical growth, occupations in health (registered nurses, home health aides), education (postsecondary teachers), sales (customer service representatives, retail salespersons) and food service are predominant on the top 20 occupations. Again, many of these occupations require baccalaureate education or less.

Wisconsin Workforce Development data (n.d.) are similar to national data with projected high growth occupations (2008-2018) involving health (home health aides, athletic trainers, physician assistants, surgical assistants, mental health counselors) and computer work (network

systems analysts). Top high-growth occupations 2008-2018 are listed in Appendix A. Wisconsin occupations with the most openings is listed in Appendix B.

2. Growth Occupations Requiring Master's or Baccalaureate Education:

Based on the Occupational Outlook Handbook (U.S. Bureau of Labor Statistics, 2010), the top 15 occupations with projected job openings due to growth and replacement needs (2008-2018) typically requiring a Master's degree are clergy, counselors (educational, vocational and school), physical therapists, social workers (mental health and substance abuse), instructional coordinators, librarians, mental health counselors, rehabilitation counselors, environmental scientists, occupational therapists, speech-language pathologists, physician assistants, operations research analysts, social scientists, geoscientists (except hydrologists and geographers). See Appendix C for the top 32 occupations. Based on Wisconsin Workforce Development data (n.d.), health occupations (i.e., mental health counselors and medical scientists) are the only high-growth occupations requiring a minimum of a Master's degree on the list of the top 26 occupations in Appendix A.

A second search was performed to identify occupations requiring a Bachelor's degree by job openings due to growth and replacement needs 2008-2018. This was done with the assumption that growth occupations requiring a Bachelor's degree will need individuals prepared at the Master's degree as well (e.g., advanced practice, teaching). Top occupations requiring a Bachelor's degree are listed in Appendix D.

C. UW System Graduate Program Growth:

Based on the *UW System Program Planning and Review 2009-2010 Annual Report*, much new program activity has occurred across the UW System. In 2009-10, for example, 15 new programs were granted entitlements to plan, 14 were authorized for implementation, and 19 were implemented within the UW System (includes programs at all educational levels). A 5 year summary of program planning and review activity statewide is part of the Report and contains a list of new programs "in the pipeline" across UW System (entitlements to plan given by UW System but not yet authorized or scheduled for implementation). Institutions have five years from the date an entitlement to plan is granted to implement the program. **The below 12 graduate programs were listed as the UW System academic program planning "pipeline" having received entitlements to plan (Table 5).** Programs in the UW System pipeline are predominantly in the areas of leadership/management (4 programs) and health (3 programs). **It is recommended that UW-Green Bay avoid duplicating any specific program that is near implementation elsewhere in the UW System in the near future.**

Table 5. UW System "Pipeline" of new graduate programs. Source: http://www.wisconsin.edu/bor/agenda/2010/december.pdf

Program name	Institution	Degree	Date entitled
Architecture	MILW	MS	11-10
Biomedical science	STO	MS	anticipated
Distance Education Leadership - online	PLT	MS	5-10
Fine Arts/Design	STO	MFA	11-07
Gerontology	STO	MS	9-09
Homeland Security	STO	MS	anticipated
Informatics	STP	MS	5-07
Integrated supply chain management - online	PLT	MS	5-10
Leadership	STP	MS	8-08
Nursing - CNL	GBY	MS	3-10
Organizational change management - online	PLT	MS	5-10
Teaching the Arts	MILW	MA	3-08

D. Potential Graduate Program Expansion at UW-Green Bay:

The UW-Green Bay "pipeline" of potential graduate programs was identified through a survey of Chairs and Directors and review of previous UW-Green Bay reports relevant to graduate program growth. In March 2011, the Graduate Task Force developed and disseminated a survey to UW-Green Bay interdisciplinary and disciplinary chairs and academic directors to identify areas of strength upon which UW-Green Bay can build graduate programs. Survey questions asked for graduate program titles (or area of emphasis) that have been considered or are being planned and a brief description and rationale for such programs (specific survey questions listed in Appendix E). The return rate was 55% (28/51). A total of 19 graduate programs were identified via the survey. All survey responses are provided in Appendix E; some graduate programs titles were described by more than one respondent. **Proposed graduate programs covered a wide range of disciplines and sorted into five broad areas of study that included Arts, Environment, Health, Management/Leadership, and Other (Table 6). UW-Green Bay Chairs and Directors identified interest in planning, previous planning, and/or consideration of the below graduate programs.**

- Arts Education
- Arts Management
- Counseling (Collaborative)
- Environmental Science, Policy and Economics
- Foreign Languages
- Global Supply Chain Management
- History and/or Public History
- Management of Information Systems (MIS)
- Nursing – Health management
- Nutritional Science/Health Promotion
- Project Management
- Public Administration/ Leadership in Public and Nonprofit Service
- Renewable Energy with Emphasis in ES&P Geoscience

- Spanish Studies
- Strategic Communication Integrated Marketing Communication
- Sustainability Leadership (sustainability management)
- Urban and Community Planning/Development
- Three respondents expressed interest in expansion of current graduate programs, specifically the Master's of Social Work Program and Master's of Environmental Science and Policy.

Table 6. Potential new or expanded graduate programs at UW-Green Bay. Data based on the March 2011 Graduate Task Force Survey.

Broad Areas	Proposed Graduate Program Titles
Arts	Arts Management
	Arts in Education
Environment	Renewable Energy with emphasis in Geoscience
	Sustainability Leadership
	Environmental Science, Policy and Economics
Health	Nursing - Health Management
	Nutritional Sciences/Health Promotion
	Counseling
Management/Leadership	Public Administration/Leadership in Public and Nonprofit Service
	Project Management
	Global Supply Chain Management
	Management of Information Systems
Other Areas	Spanish Studies
	Foreign Languages
	Strategic Integrated Marketing Communication
	History and/or Public History
	Public Administration
	Urban and Community Planning/Development

Graduate program growth was considered in 2008 when a consultant was hired to assist with a strategic growth agenda and documents submitted by UW-Green Bay for the biennium

budget. The consultant held focus group sessions over a three day period with faculty, chairs, directors, and administrative groups on campus. A Graduate and Centers of Excellent Session occurred on February 6, 2008 around the questions of 1) Will UW-Green Bay formally declare a graduate enterprise?, and 2) Will the UW-Green Bay enterprise reflect five thematic pathways to preeminence – environmental, business management, public policy, education and social work? **Transcripts of the session indicate mention of the graduate programs in the following areas: business management, environmental, public policy, education, social work, sports management, arts management, healthcare management, and public administration.** No other relevant reports on new graduate programs were retrieved and reviewed.

E. Process of Developing New Programs:

Development of a new program in the UW System is a lengthy, multi-step process requiring two major stages. It has been estimated that the average time for development of a new program in the UW System is approximately two years. The first stage of the process involves determining the feasibility of adding a new program and writing an Entitlement to Plan request. This stage requires initial evaluation of the new program including documentation of need and market demand, overview of curriculum, relation to institutional mission, and relation to other UW-System programs. The Entitlement to Plan document must be approved by the department executive committee, Dean, and Provost. This document is sent to UW System for review and circulation to Provosts at all UW System institutions for comment (30 day comment period) before a formal decision is made by the UW System Associate Vice President.

The second, and more complex, stage of the new program development process involves planning the new program, writing an Authorization to Implement request, and seeking approval through campus governance bodies and UW System. Program planning includes further development of the curriculum and periodicity of new courses, documentation of student demand, projected enrollment, description of resources (additional faculty and staff requirements, facilities, etc), operating budget, and consultation with two outside reviewers to review the new program plan. Approval of the Authorization to Implement document at the campus level includes movement through relevant department Executive Committees, Graduate Programs Committee, Dean, Academic Affairs Committee, Faculty Senate (typically two readings), Provost, and Chancellor. The document then moves on to UW-System (committees and Regents).

A large amount of faculty time and financial resources (e.g., payment of consultants, costs associated with market demand survey) are required to successfully complete development and planning for a new program. Faculty time is needed for curriculum development, course development and course approval process. Chair time is required to arrange consultant reviews, write request documents, evaluate student demand and projected enrollment and determine an operating budget. Time is also required of other departments including the Graduate Studies Office, Students Services (Admissions, Enrollment Services, Registrar), Dean of Professional Studies, and technology service (if program is online).

F. Congruence of New Graduate Programs with the University Mission:

As an institution in the University Cluster of the University of Wisconsin-System, UW-Green Bay shares a UW-System core mission with other institutions of the Cluster. One of the elements of the core mission is to offer, "Associate and Baccalaureate degree level and selected graduate programs within the context of its approved select mission" (UW-Green Bay, 2009). **UW System closely considers in approval of new programs whether the development of a new program is consistent with the campus mission.** UW-Green Bay's mission does not explicitly state that delivery of associate, baccalaureate, and graduate programs is part of its mission. **The UW-Green Bay mission is:**

> *The University of Wisconsin-Green Bay provides an interdisciplinary, problem-focused educational experience that prepares students to think critically and address complex issues in a multicultural and evolving world. The University enriches the quality of life for students and the community by embracing the educational value of diversity, promoting environmental sustainability, encouraging engaged citizenship, and serving as an intellectual, cultural and economic resource.*

Consideration needs to be given to develop new graduate programs that align with the campus mission. Graduate programs that are interdisciplinary, promote environmental sustainability, and allow graduate students to address complex issues in a diverse and global world would be congruent with the UW-Green Bay mission. Given the UW-Green Bay mission, it would be appropriate for each Master's Degree program at UW-Green Bay to include global components in the coursework (e.g., foreign language requirements, coursework on different world regions or global development problems) to be determined by the faculty in each graduate program. This would ensure that graduates have maximum flexibility in the job market and in the future, and strong preparation to deal with a complex and global world. Even if students have no intention of leaving Wisconsin during their careers, the world today is globally integrated and the world will come to them no matter what the field (e.g., encounters with people who speak different languages, holding different worldviews). The more graduate programs prepare students for such encounters and working relationships, the more competitive UWGB will be in drawing students from the region, from around the country, and the world.

Enhancing specific employment opportunities through educational means is certainly a goal of graduate education, but it is not the only goal. Consideration of what students want and need from a graduate education, besides credentials for a particular job, is important. **Providing a widely applicable skill set that can potentially cross many fields might be more attractive to students and better prepare them to cope with a dynamic and unpredictable future.** For example, social science research methodologies such as survey design, grant and formal report-writing skills, information management software programs for wrestling with complex data are all useful across many fields. **Unique options for graduate educations that utilize interdisciplinary resources should be considered.** Development of a graduate core (e.g., research, data handling, teaching) required for all graduate students combined with discipline specific graduate courses may be attractive to students and an efficient use of resources. This type of graduate degree could have a title which identifies the common core as well as disciplinary focus (e.g., "Master's in Applied Studies – Spanish Studies"). As mentioned in the

mission statement, graduate programs offered at UW-Green Bay serve as "intellectual, cultural, and economic resources" for the region (UW-Green Bay, 2009). Consideration of what the region most needs and proactive "shaping" in the region (versus reacting) is needed.

G. Limitations of Current Data:

While a portion of the analysis contained in this report utilizes some current and projected data for employability of graduates, it is recognized that there are limitations to sole reliance on such data. A data source that is missing is the knowledge of economic and planning directives of regional municipalities and organizations. Universities are increasingly seen not just as supporters of economic development but as agents central to economic growth especially in the period of deindustrialization and regional economic transition. **Recent research indicates that regional development schemes that integrate and synergize the efforts of municipalities, universities, and the region are more successful in their efforts. Therefore, cooperation with local and regional entities would provide specified information that would be of importance in the development of new graduate programs and the subsequent success of these programs.**

Another limitation is that the Occupational Outlook Data used was based on state and national employment projections and international occupational data and trends were not considered. Inclusion of global employment data sources would provide a more comprehensive view of the occupational outlook. A competitor analysis was not performed for this report. The prior section contains a view of "competition" within a 1.5 hour driving radius from Green Bay. Viewing our competition in geographic terms may become increasingly less relevant as more online education becomes available. Such an analysis of both public and private institutions (both campus based and online) will need to be considered in determining areas for graduate program growth.

A survey of UW-Green Bay Chairs and Directors was used to tap faculty interest and knowledge about possibly graduate programs. Responses received were likely limited by the short turnaround time. Additional information from faculty would be useful. A well-designed survey would not only provide more creative and informed suggestions, it would also help identify what resources and infrastructure are already in place that could be the foundation for developing new programs.

H. Summary and Recommendations for New Graduate Programs at UW-Green Bay:

Based on the above data collection and analysis, potential areas of growth and areas of UW-Green Bay interest and strength were highlighted throughout the report. **The health and computer sectors show occupations with the fastest growth in general. Growth occupations requiring a master's degree include health occupations (e.g., counselors, physical therapists), environmental occupations (environmental scientists, geoscientists), and operations research analysts.** Occupational outlook data needs to be considered as one source of data in planning for new graduate programs. Such data needs to be considered in light of strengths at UW-Green Bay (faculty, programs, resources, facilities, etc), initiatives of regional municipalities and organizations, global occupational data.

The UW System pipeline contains a number of new graduate programs in health and management/leadership areas. UW-Green bay has a potential pipeline for graduate programs that sort into the five areas of arts, environment, health, management/leadership and other degrees. Consideration of resources needed to start new programs (e.g., Chair and faculty time) and congruence of the institution's mission and potential graduate program growth need to be considered. **The UW-Green Bay mission addresses interdisciplinarity, environmental sustainability and critical thinking in a global world; each of these areas could be considered in building new graduate programs. The following recommendations are proposed in considering growth in new graduate programs.**

1) Incorporate University strategic initiatives and mission in planning for new graduate programs. If graduate programs are part of the UW-Green Bay mission then consider revision of the UW-Green Bay mission to include the types of programs offered at UW-Green Bay (i.e., the university delivers associate, baccalaureate, and graduate programs).
2) Health, environment, and computer sectors are growing areas. Possible "synergy" around these areas and evaluation of how departments can contribute to graduate programs in these areas would create innovative opportunities (e.g., environmental health, health education, integrated supply chain management).
3) Unit chairs at UW-Green Bay identified via survey numerous potential graduate programs and should be encouraged to provide additional detail and analysis on these potential new programs. Faculty input would also be useful to further describe potential programs in identified areas.
4) Consider flexible options for graduate education that utilize interdisciplinary resources, such as development of a graduate core (e.g., research, data handling, teaching) to be taken by all graduate students combined with discipline specific graduate courses. This would provide graduates with a shared and widely applicable skill set that crosses many disciplines and professions. This can also serve as a strategy to most efficiently use campus resources.
5) Consider inclusion of international components (study abroad, language requirement, or content) in development of graduate programs given that the marketplace is global.
6) Careful examination of resources available at UW-Green Bay (human, financial, etc) to accomplish new graduate program development is needed given the numerous and lengthy process involved in development of new graduate programs (e.g., numerous governance approvals on campus, two step approval by UW System, requirement to hire two outside consultants, analysis of need and demand data, etc).
7) Consider existing strengths and resources at UW-Green Bay (faculty, resources, programs, facilities) along with occupational outlook data and trends should guide planning of new graduate programs.
8) Additional occupational outlook data is needed on projections for future global employment sectors.
9) A competition analysis is needed on areas considered for new graduate programs. Such an analysis would identify costs, credentials, enrollment, and graduation rates of graduate programs including on-line programs regionally and nationally.

VII. Acknowledgements:

The Graduate Task Force thanks Deborah Furlong for providing numerous institutional and regional data sets to our group, Amy Bartelme provided invaluable institutional memory and guidance throughout the project, Thomas Maki provided an invaluable overview of University funding mechanisms, and Timothy Seawall provided very insightful guidance for information included in several sections of this report. Finally, we thank Rebecca Ouradnik for help in facilitating meeting times for our group. M. Dornbush provides specific acknowledgement of the extensive contributions from Task Force Members S. Gallagher-Lepak, M. Russ, D. Spielmann, and P. Terry.

VIII. Literature Cited:

Florida, R. (n.d.). The role of the university: Leveraging talent, not technology. Retrieved from http://www.aaas.org/spp/yearbook/2000/ch31.pdf

U.S. Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections (2010), Occupational Outlook Handbook (2101-11 edition). Retrieved from http://www.bls.gov/oco/oco2003.htm

UW-Green Bay (2009). Campus profile: Mission statement. Retrieved at from http://www.uwgb.edu/univcomm/about-campus/mission.htm).

UW System (2010). UW System Program Planning Report. Retrieved from: http://www.wisconsin.edu/bor/agenda/2010/december.pdf (click "Education Committee" on left side menu; see pages 13-28).

Wisconsin Department of Workforce Development (n.d.). WORKnet. Retrieved from http://worknet.wisconsin.gov/worknet/default.aspx

National Research Council (NRC). 2008. Science professionals: Master's education for a competitive world. The National Academic Press, Washington, D.C., USA.

Appendix A: Wisconsin High-Growth Occupations - occupations projected to grow the fastest during the 2008-2018 period are listed below. URL: http://worknet.wisconsin.gov/worknet/default.aspx

Occupation	Employment in 2008	Employment in 2018	% Change	Degree Needed
Home health Aides	20730	28670	38.3	On the Job Training
Network Systems and Data Communications Analysts	7860	10760	36.9	BA
Personal and Home Care Aides	21720	29100	34.0	On the Job Training
Financial Examiners	440	580	31.8	BA
Ambulance Drivers/Attendants, Exc. Emergency medical Tech	530	700	32.1	On the Job Training
Athletic Trainers	440	560	27.3	BA
Physician Assistants	1670	2120	26.9	BA
Surgical Technologists	2660	3330	25.2	Post-Secondary Training
Medical Equipment Repairers	1220	1520	24.6	Associates
Physical Therapist Aides	1080	1350	25.0	On the Job Training
Mental health Counselors	1880	2330	23.9	MA
Cardiovascular Technologists and Technicians	960	1180	22.9	Associates
Animal Trainers	590	730	23.7	On the Job Training
Gaming Dealers	920	1140	23.9	Post-Secondary Training
Medical Scientists, Except Epidemiologists	2890	3540	22.5	PhD
Compliance Officers, Except Ag/Constr/Health/Safety/Trans	3780	4630	22.5	On the Job Training
Medical Assistants	9860	11960	21.3	On the Job Training
Dental Assistants	6060	7340	21.1	On the Job Training
Dental Hygienists	4920	5960	21.1	Associates
Respiratory Therapists	2240	2710	21.0	Associates
Funeral Directors	800	970	21.3	Associates
Skin Care Specialists	550	650	18.2	Post-Secondary Training
Personal Financial Advisors	4290	5130	19.6	BA
Registered Nurses	54420	64990	19.4	BA
Employment, Recruitment, and Placement Specialists	5450	6490	19.1	BA

Appendix B: Wisconsin Occupations with the Most Openings

Wisconsin Occupations with the Most Openings

Listed below are occupations with the largest number of projected openings during the 2006-2016 time period.

Occupation	Employment in 2006	Average Annual Job Openings*
Retail Salespersons	85,660	3,240
Cashiers	66,070	3,140
Waiters and Waitresses	48,070	3,090
Registered Nurses	**51,130**	**2,180**
Customer Service Representatives	43,840	2,100
Combined Food Preparation/Serving Workers, Incl. Fast Food	58,910	2,080
Laborers and Freight, Stock, and Material Movers, Hand	54,080	1,730
Janitors/Cleaners, Except Maids and Housekeeping Cleaners	57,780	1,700
Truck Drivers, Heavy and Tractor-Trailer	53,700	1,520
Office Clerks, General	49,130	1,400
Personal and Home Care Aides	22,030	1,220
Bookkeeping, Accounting, and Auditing Clerks	47,710	1,200
Bartenders	24,110	1,120
Sales Reps, Wholesale/Mfg, Exc Technical/Scientific Products	37,320	1,100
Child Care Workers	22,970	1,050
Team Assemblers	40,730	1,040
Receptionists and Information Clerks	26,180	1,020
Elementary School Teachers, Except Special Education	**32,790**	**960**
Executive Secretaries and Administrative Assistants	31,660	880
Home Health Aides	16,550	830
Tellers	14,160	830
Nursing Aides, Orderlies, and Attendants	36,740	800
Maids and Housekeeping Cleaners	25,810	800
Stock Clerks and Order Fillers	33,570	800
Accountants and Auditors	**23,810**	**770**

*Average annual job openings = Average annual job openings due to growth and net replacements
URL: http://worknet.wisconsin.gov/worknet/default.aspx

Appendix C: Occupations Requiring Master's Degree Preparation - below are all 32 occupations for which the typical postsecondary-education or training category is Master's degree, sorted by job openings due to growth and replacement needs, 2008-2018. Source: U.S. Bureau of Labor Statistics (2010)

Occupation	Employment (in thousands)		Employment Change, 2008-2018		Percent self-employed, 2008	Job openings due to growth and replacement needs, 2008-2018 (in thousands)	2008 Median annual wages (Dollars)	Median annual wages quartile*	Most significant source of postsecondary education or training
	2008	2018	Number (in thousands)	Percent					
Clergy	670.1	755.2	85.1	12.7	0.1	217.7	41,730	H	Master's
Educational, vocational, and school counselors	275.8	314.4	38.6	14.0	5.8	94.4	51,050	H	Master's
Physical therapists	185.5	241.7	56.2	30.3	8.0	78.6	72,790	VH	Master's
Mental health and substance abuse social workers	137.3	164.1	26.8	19.5	2.2	61.3	37,210	H	Master's
Instructional coordinators	133.9	165.0	31.1	23.2	2.9	60.6	56,880	VH	Master's
Librarians	159.9	172.4	12.5	7.8	0.3	54.5	52,530	VH	Master's
Rehabilitation counselors	129.5	154.1	24.5	19.0	5.7	50.7	30,930	L	Master's
Mental health counselors	113.3	140.4	27.2	24.0	6.1	50.1	36,810	H	Master's
Environmental scientists and specialists, including health	85.9	109.8	23.9	27.9	2.4	48.4	59,750	VH	Master's
Occupational therapists	104.5	131.3	26.8	25.6	7.0	45.8	66,780	VH	Master's
Speech-language pathologists	119.3	141.4	22.1	18.5	9.0	43.8	62,930	VH	Master's
Physician assistants	74.8	103.9	29.2	39.0	1.4	42.8	81,230	VH	Master's
Operations research analysts	63.0	76.9	13.9	22.0	0.2	32.2	69,000	VH	Master's
Social scientists and related workers, all other	32.8	40.1	7.4	22.4	1.5	23.8	68,720	VH	Master's
Geoscientists, except hydrologists and geographers	33.6	39.4	5.9	17.5	2.4	15.4	79,160	VH	Master's
Urban and regional planners	38.4	45.7	7.3	19.0	0.0	14.7	59,810	VH	Master's
Counselors, all other	33.4	37.8	4.4	13.1	5.9	11.1	39,930	H	Master's
Statisticians	22.6	25.5	2.9	13.1	2.8	9.6	72,610	VH	Master's
Marriage and family therapists	27.3	31.3	3.9	14.5	5.9	9.5	44,590	H	Master's

Psychologists, all other	15.9	18.3	2.3	14.4	32.8	6.8	86,120	VH	Master's
Curators	11.7	14.4	2.7	23.0	1.9	6.2	47,220	H	Master's
Economists	14.6	15.5	0.9	5.8	7.9	5.0	83,590	VH	Master's
Anthropologists and archeologists	5.8	7.4	1.6	28.1	1.5	4.5	53,910	VH	Master's
Hydrologists	8.1	9.6	1.5	18.3	2.4	3.8	71,450	VH	Master's
Mathematical scientists, all other	6.6	7.8	1.2	17.6	0.0	3.1	54,990	VH	Master's
Political scientists	4.1	4.9	0.8	19.5	1.4	2.8	104,130	VH	Master's
Historians	4.1	4.5	0.5	11.5	1.5	2.5	54,530	VH	Master's
Archivists	6.3	6.7	0.4	6.5	1.7	2.3	45,020	H	Master's
Sociologists	4.9	6.0	1.1	21.9	0.0	2.0	68,570	VH	Master's
Epidemiologists	4.8	5.5	0.7	15.1	2.5	1.7	61,360	VH	Master's
Industrial-organizational psychologists	2.3	2.9	0.6	26.3	33.6	1.3	77,010	VH	Master's
Geographers	1.3	1.6	0.3	26.2	1.5	1.0	66,600	VH	Master's

* VH = Very High; H = High; L = Low; VL = Very Low; n.a. = not available

Appendix D: Occupations Requiring a Bachelors Degree sorted by job openings due to growth and replacement needs 2008-2018. Below are 36 occupations for which the typical postsecondary-education or training category is Bachelor's degree, sorted by job openings due to growth and replacement needs, 2008-2018. Source: U.S. Bureau of Labor Statistics (2010)

Occupation	Employment (in thousands)		Employment Change, 2008-2018		Percent self-employed, 2008	Job openings due to growth and replacement needs, 2008-2018 (in thousands)	2008 Median annual wages (Dollars)	Median annual wages quartile*	Most significant source of postsecondary education or training
	2008	2018	Number (in thousands)	Percent					
Elementary school teachers, except special education	1,549.5	1,793.7	244.2	15.8	0.0	596.5	49,330	H	Bachelor's
Accountants and auditors	1,290.6	1,570.0	279.4	21.7	8.1	497.5	59,430	VH	Bachelor's
Secondary school teachers, except special and vocational education	1,087.7	1,184.1	96.3	8.9	0.0	412.4	51,180	H	Bachelor's
Business operation specialists, all other	1,091.1	1,217.0	125.9	11.5	0.6	368.3	59,920	VH	Bachelor's
Middle school teachers, except special and vocational education	659.5	760.6	101.2	15.3	0.0	251.1	49,700	H	Bachelor's
Teachers and instructors, all other	749.7	860.1	110.4	14.7	20.6	225.7	31,100	L	Bachelor's
Computer systems analysts	532.2	640.3	108.1	20.3	5.7	222.8	75,500	VH	Bachelor's
Computer software engineers, applications	514.8	689.9	175.1	34.0	2.7	218.4	85,430	VH	Bachelor's
Network systems and data communications analysts	292.0	447.8	155.8	53.4	19.4	208.3	71,100	VH	Bachelor's
Computer software engineers, systems software	394.8	515.0	120.2	30.4	2.7	153.4	92,430	VH	Bachelor's
Construction managers	551.0	645.8	94.8	17.2	60.9	137.7	79,860	VH	Bachelor's
Market research analysts	249.8	319.9	70.1	28.1	6.8	137.3	61,070	VH	Bachelor's
Network and computer systems administrators	339.5	418.4	78.9	23.2	0.8	135.5	66,310	VH	Bachelor's
Public relations specialists	275.2	341.3	66.2	24.0	4.5	131.3	51,280	H	Bachelor's
Securities, commodities, and financial services sales agents	317.2	346.7	29.6	9.3	15.4	126.8	68,680	VH	Bachelor's
Graphic designers	286.1	323.1	36.9	12.9	26.3	124.8	42,400	H	Bachelor's
Civil engineers	278.4	345.9	67.6	24.3	4.3	114.6	74,600	VH	Bachelor's

Employment, recruitment, and placement specialists	207.9	265.9	58.0	27.9	1.6	112.3	45,470	H	Bachelor's
Child, family, and school social workers	292.6	328.7	36.1	12.3	2.2	109.6	39,530	H	Bachelor's
Training and development specialists	216.6	267.1	50.5	23.3	1.6	107.1	51,450	H	Bachelor's
Human resources, training, and labor relations specialists, all other	224.6	271.9	47.2	21.0	1.6	105.9	55,710	VH	Bachelor's
Cost estimators	217.8	272.9	55.2	25.3	2.0	103.6	56,510	VH	Bachelor's
Special education teachers, preschool, kindergarten, and elementary school	226.0	270.3	44.3	19.6	0.2	102.9	50,020	H	Bachelor's
Financial analysts	250.6	300.3	49.6	19.8	4.6	95.2	73,150	VH	Bachelor's
Industrial engineers	214.8	245.3	30.6	14.2	0.7	85.4	73,820	VH	Bachelor's
Personal financial advisors	208.4	271.2	62.8	30.1	29.3	85.3	69,050	VH	Bachelor's
Computer programmers	426.7	414.4	-12.3	-2.9	5.5	80.3	69,620	VH	Bachelor's
Property, real estate, and community association managers	304.1	329.7	25.6	8.4	45.9	78.0	46,130	H	Bachelor's
Mechanical engineers	238.7	253.1	14.4	6.0	2.3	75.7	74,920	VH	Bachelor's
Medical and public health social workers	138.7	169.8	31.1	22.4	2.2	65.9	45,650	H	Bachelor's
Kindergarten teachers, except special education	179.5	206.5	27.0	15.0	1.6	63.0	47,100	H	Bachelor's
Compensation, benefits, and job analysis specialists	121.9	150.6	28.7	23.6	1.6	60.5	53,860	VH	Bachelor's
Special education teachers, secondary school	146.7	166.2	19.5	13.3	0.2	57.5	51,340	H	Bachelor's
Writers and authors	151.7	174.1	22.5	14.8	69.4	54.2	53,070	VH	Bachelor's
Medical and clinical laboratory technologists	172.4	193.0	20.5	11.9	0.2	53.3	53,500	VH	Bachelor's
All other engineers	183.2	195.4	12.2	6.7	6.4	50.2	88,570	VH	Bachelor's

* VH = Very High; H = High; L = Low; VL = Very Low; n.a. = not available

Appendix E: 2011 Survey of UW-Green Bay Chairs and Directors

In March 2011, the Graduate Task Force developed and disseminated a survey to UW-Green Bay interdisciplinary and disciplinary chairs and academic directors to identify areas of interest and planning of graduate programs at UW-Green Bay. Survey questions covered those graduate program titles or emphasis areas considered or planned by the units represented by survey respondents. The following specific questions were included (respondents listed in parentheses):

Q1: Proposed graduate program title or area of emphasis;

Q2: Brief justification for proposed graduate program (e.g. current student demand, area of future job growth, regional need, faculty interest, etc);

Q3: Brief description of very basic graduate program structure (e.g. coursework only, thesis requirement, internship requirement, etc);

Q4: Brief description of potential modes of delivery (e.g. traditional classroom meeting times, classroom at night, classroom on weekends, web-based instruction, a combination of offerings, etc):

Q5: Brief description of the likely contributing disciplines and budgetary units:

Master's Degree in Spanish Studies (C. Ortiz):

Q2: The increased demand for knowledge of Spanish language and culture does not limit itself to the undergraduate level. More professionals in the area (especially teachers) are in need of graduate courses in Spanish in the field to continue with their professional development. Undergraduate students are also requesting the possibility to continue their education in a language pass the proficiency knowledge that the major confers. Thus, there is a great need for a Master program. In recent years, professionals from the Green Bay community have approached the Spanish program faculty and the Education Department requesting the implementation of graduate courses in a Master program that will meet their needs.

Q3: Coursework -Final thesis or examination

Q4: Combination of offerings (web-based instruction and face-to-face) with summer program and Study Abroad opportunities.

Q5: Spanish Education

Environmental Science, Policy and Economics – Policy Emphasis (M. Kraft):

Q2: Historically there was substantial demand for this program, nationally and internationally. However, because of the rise of competing programs at other universities, the failure to promote the program and recruit students, and most particularly the termination of all graduate assistantships in the policy emphasis, enrollment in this emphasis fell out precipitously. Only now does it seem to be rising again. There is clearly considerable continuing faculty strength in Public and Environmental Affairs that has not been well utilized in the program, mostly because of high

undergraduate enrollment demand that left little by way of faculty resources for the graduate program. However, with increasing interest among students and increasing job growth in the area, it would be foolish to ignore this potential and the heritage of strength that we have had. Much more could be done to ensure adequate faculty resources within PEA to permit a greater contribution to the ES and P graduate program.

Q3: The current ES and P requirements essentially would continue, but at the moment we are not co-teaching either Perspectives or the capstone seminar, nor are several graduate policy courses being offered because of reduced resources and undergraduate demands. With minimal additional resources, this could be changed.

Q4: Could be any combination of these, but most of the courses would be traditional classroom meeting times, possibly supplemented by summer or weekend intensive courses using both regular and emeriti faculty.

Q5: PEA, Political Science, and Economics would be the key ones.

Environmental Science, Policy and Economics (B. Howe):

Q2: We need to strengthen the programs that we have, not start new ones. This slightly modified program would tie in well with the EMBI and would maintain (and enhance) the flexibility that we already have in ES & P. Economics is a reality of science and policy - just as environmental science and policy are becoming increasingly important for economics. I think that a program like this would have international appeal and should be pitched at an international audience.

Q3: The program should still require a thesis, in my opinion. Having supervised many theses over the years, I have witnessed this last stage as the most important one in the development of most students. The thesis doesn't have to be a tome, but it should be rigorous and publishable. Coursework should be minimal and focused on supporting the thesis project. I think the curriculum should rest on just 3 core courses: 1) an environmental science course that emphasizes scientific approaches to problem-solving (experimentation, modeling, and resource inventory/adaptive management), the ecosystem concept, and perhaps evolutionary ecology; 2) a course in U.S. and international environmental policy; and 3) a course in basic economics, including ecological accounting. Elective courses and seminars can make up the rest of the curriculum, with an emphasis on skills like effective writing and communication.

Q4: Combination of web-based and webinar meetings should be the preferred mode of delivery. Traditional classroom meetings restrict the program to a local audience. I think we should look at these alternatives, in addition to one or two mandatory annual face-to-face meetings, either through web conference or traditional committee meetings. In addition to a tightly integrated web of communication among students, we need to have a MUCH better integration among faculty, especially if we want to pursue an expanded interdisciplinary initiative like this.

Q5: NAS, ES & P, Austin Cofrin School of Business.

Professional Science Master's Program in Environmental Science and Policy (program would directly involve the Environmental and Management and Business Institute and the Cofrin School of Business) (K. Fermanich):

Q2: Professional Science Master's (PSM) programs are designed to meet the expressed needs of nonacademic employers (businesses, NGOs, government agencies, etc.). An essential aspects of these graduate programs is foundational training and experience in science and math that is integrated with coursework and experience in business, management, and public policy. The need and future market for these types of programs has been articulated in a several national articles and NSF funded initiatives (see references below). In some ways the ES&P program has functioned as a PSM program, but we can now strengthen our ties to business and environmental sustainability initiatives and build a program specifically designed to meet the needs of employers. There is faculty interest in a new PSM program that builds on our ES&P program. Substantive background and planning work was completed as part of a NSF proposal to establish a STEM-based PSM program that was submitted in 2009 by several ES&P faculty. We believe that this type of program would be attractive to working professional throughout the region, especially if we have a non-thesis option (MA degree). References: "Needed: Support for Professional Science Master's Degrees" Chronical of Higher Education, August 15, 2010; Professional Science Master's at www.scienceMaster's.com; "Science Professionals: Master's Education for a Competitive World" National Research Council, 2008 (http://www.nap.edu/catalog.php?record_id=12064) "The professional science master's degree is growing in popularity but is losing its initial funding. Can it survive?" Nature vol. 469, pg. 569, January 2011. NSF: Division of Graduate Education, Science Master's Program (SMP) (http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503428

Q3: We anticipate most PSM students would participate in one of the two STEM emphases in the current ES&P program (Environmental Technology and Analysis or Ecosystem Management), but, depending on a student's undergraduate background, a student may be enrolled in the Environmental Policy emphasis or a new emphasis in Environmental Sustainability. New coursework in "Scientific Entrepreneurship" and "Business and Sustainability" would also be developed for the program. PSM students may also be required to participate, in a series of theme-based field trips to industries, project sites, or agencies where STEM knowledge and skills are being applied in real-world settings to solve environmental, ecological, and/or sustainability challenges. An internship/coop experience would be required for the program. There is interest in exploring a non-thesis option for this program. A final individual or group project would be required for the non-thesis option. To the greatest extent possible, thesis or final project research will be performed collaboratively with UW-Green Bay public/private sector partners to produce a final product that provides both a meaningful intellectual project for students and a valuable service to partners. We anticipate that the EMBI would play a major role in facilitating partnerships with organizations outside of UWGB.

Q4: Most delivery will be face-to-face as currently done for the ES&P program. Many of our current graduate courses are offered in the evening to accommodate part-time and working students. Some of the courses could be offered online.

Q5: Natural and Applied Sciences, Public and Environmental Affairs, Cofrin School of Business, EMBI, ES&P (includes faculty from NAS, PEA, HUB and URS).

Master's of Arts in Environmental Science and Policy (non-thesis option in ES&P) (K.Fermanich):

Q2: A non-thesis option within the ES&P program has been discussed and proposed perviously (2002-2003 proposal). It was not moved forward at that time partly because of lack of resources. Faculty are interested in exploring the non-thesis option at this time because it may appeal to many part-time students and allow us to serve a greater number of students.

Q3: Non-thesis option to some or all of the current emphases in ES&P. May require individual or group project as a partial replacement for the thesis. Additional course would likely be required.

Q4: The program would include mostly existing courses. Some of the instruction could be web-based. Evening classes would be a significant part of the program.

Q5: Current units contributing to ES&P. There is potential to broading participation from other units. All initiatives from ES&P will need a change in resource allocations and levels.

Master's Degree in Foreign Languages (D. Coury):

Q2: I know there is a high demand in Spanish for an MA program and recently we received the following e-mail from an area German teacher: David, Charity Ramer, Francine Cook and I were talking about the possibility of earning a Master in German and where one would need to go to get one. Charity mentioned that you had said a couple of years ago when she went to UWGB to upgrade her German degree to a major that you might be interested in doing a Master in German program at UWGB, if there were enough teachers interested. Would you still want to do that? And if so, how many people would we need and when could we get started? A couple of reasons... 1. I have started a master in counseling and would prefer to do one in German. 2. Our district is interested in doing a CAP program like Menasha does with UWO and to do that the high school teacher must have a master in the language. Thanks for your time and consideration! Melanie Lasee World Language Program Leader German Teacher GAPP Coordinator Ashwaubenon High School

Q3: Over the years, we have had discussions with UW-Milwaukee about having a joint MA program, whereby some of the courses could be taken here and then finished up at UWM. This could still be a possibility if there were not enough resources here to helo with the requirements. In the Humanities, there would be a thesis or exam requirement as well as an array of graduate level courses. Maybe of those could be offered here as combined undergraduate UL courses and grad courses. We have a similar set-up at the University of Cincinnati where I did my graduate work.

Q4: The majority of potential people in any given cohort would most likely be current teachers. Therefore it would be important to have a variety of courses--hybrid, evening, summer, etc. However since a language component is central to all of our courses, I don't believe that an entire web-based program would be desirable.

Q5: I don't know if it's possible, but if we could have an MA in Modern Languages, that would allow us to offer MA degrees in French, German and Spanish. Obviously the demand is greatest in Spanish, but this would allow, on occasion, to have students in the other two languages as well.

Master's Degree in Renewable Energy Emphasis in ES&P Geoscience (John Luczaj):

Q2: With growing energy demands and dwindling resources, renewable energy will play an increasing role in the energy production of the future. Because of the nature of wind, solar, etc., these will be locally distributed, so our graduates will likely be able to get jobs locally. A geoscience/natural resource emphasis in ES&P will be important because of the future of mining in northern Wisconsin and the Upper Peninsula of Michigan. Many new mines are coming online in Michigan, and it is very likely that new iron mines and base metal mines will open in the near future in northern Wisconsin. Our graduates will be in a good position to gain employment in this sector.

Q3: I believe the renewable energy emphasis could be a non-thesis requirement, but it would/should? include a hands-on component. This might be costly, but it would greatly benefit our campus. If we don't do it - one or more of our competitors will. The natural resource emphasis would require coursework and should still retain the thesis option. I believe this would require an additional faculty member with some additional geoscience/economic geology expertise. This may even be as simple (as a start) to offering co-listed geoscience/ES&P courses such as "economic geology", etc.

Q4: Classroom and lab-based instruction

Q5: For renewable energy, physics and engineering would be required. For a biofuels portion, probably chemistry and biology. (All NAS) For the natural resource/geoscience, the geoscience faculty of NAS would be the contributors.

Master's Degree in Strategic Integrated Marketing Communication, and Management of Information Systems (Tim Meyer):

Q2: Both of these programs would fill a distinct need in the marketplace -- regionally and in the state. IMC would definitely be a cooperative program between bus admin and comm. Strategic Communication would be mostly housed in Comm but there would be other graduate courses which could be added to the list of electives as the program was laid out. Comm currently has the faculty to either mount or contribute half or more to for these programs. MIS has been trotted out regularly over the past 15 years and seems to be best suited to the grad level. Again, a collaboration would be essential. Information Science faculty, Comm faculty (some are one in the same) and business faculty would contribute to the curriculum. Employers want tech savvy, business-wise expertise in their companies to effectively compete in a global, tech-reliant economy. Graduates of such a program would fill the bill.

Q3: Definitely an internship requirement for all of the above; thesis would be an option, paired with a project-centered course as a requirement for all three, too.

Q4: A mix would seem necessary. There is a distinct and definite need for some of the courses to be offered in traditional face to face settings, at least once a week (or more if over a summer term). Some courses could be delivered exclusively online.

Q5: See above; ICS -- Communication, Information Sciences, perhaps Computer Science; Bus Admin -- marketing, management.

Master's Degree in Nutrition Science/Health Promotion (K. Lacey):

Q2: Our Human Biology Department currently houses two accredited dietetic programs; the undergraduate DPD and the post baccalaureate dietetic internship. There continues to be an increased demand for internships and a number of our students who are not initially accepted into the internship would benefit from continued graduate studies. Furthermore, if our internship were combined with graduate work, the interns would be eligible for financial aid as students (currently they are only certificate students and therefore cannot obtain financial aid or even loan deferment) There is also the possibility to collaborate with UW-Stevens Point for both a graduate program and expansion of the dietetic internship.

Q3: Depending on how this would be structured, it could be a combination; but in all cases should involve a thesis.

Q4: combination of offerings

Q5: HUB

Master's in Public Administration/ Leadership in Public and Nonprofit Service (D. Scheberle):

Q2: We've longed talked about a cooperative program with UW-O, and we've just started a Leadership in Public Service on-line area of emphasis in cooperation with Outreach/ Adult Degree.

Q3: On-line, with professional paper requirement and e-portfolio.

Q4: online

Q5: Has not gone further than the idea stage.

Master's Degree in Arts Education (K.Deetz; J. Mokren):

Q2: Many of our Art Education grads and other regional public school art teachers need to take class hours for recertification and to move up the pay scale. Pursuing a Master's in art education at UWGB will help teachers recertify, get pay raises, and have more content specific training. Education courses might provide more information about teaching but they do not help the students to be become better artists, i.e. know more about how to make art thereby becoming more informed teachers in their area of expertise. The current UWGB Master's of Science in Applied Leadership for Teaching and Learning is a step in this direction. There is definitely a regional need for an advanced degree in art education. There are no other programs in NE Wisconsin for art educators.

Q3: A Master's in Art Education will consist of some of the classes in the current UWGB MSAL program but would have more specific requirements in art. A Master's degree in Art Education would need an experienced, full-time art education professional to run the program. This new faculty member could be shared by the Art and Education programs. In previous years the Art Discipline had a full time faculty member with a doctorate in Art Education to run our undergraduate art education program. If we could recapture this person to teach the Art Education methods classes (work with Art Ed undergrads and grads), we would not only improve

and enhance what we do for those seeking graduate degrees in art education but we would also improve the quality of what we offer to our Art Education undergrads.

Q4: Course work and a thesis requirement would be comparable to other MA programs in Art Education. Courses could include upper-level art history and education classes via on-line instruction (three of our upper-level art history courses are currently offered on-line) or at night or weekends; studio art classes could be taken with a grad level designation and have students meet independently with instructor or concurrently with advanced undergrad classes.

Q5: Education and Art Discipline (currently part of Arts and Visual Design); Communication

Master's of Art Education (A.Gates):

Q2: Student demand, area of future job growth, regional need. Recruitment for BA in Art Ed. Strengthening ties to k-12 schools within driving distance of our campus. Good tie-in with our growing number of art/theory courses through Adult Degree. Possible graduate student teaching assistantships could ease ad hoc pressures in art/art theory/design arts.

Q3: Working with the art and education faculty towards a thesis, with possible internship teaching in a lower-level Art Foundations course or Art Theory course (art appreciation, understanding the arts, etc.)

Q4: Multiple modes but probably best served through hybrid course offerings, non-traditional meeting times (since we would probably be granting MA's to working teachers.)

Q5: Art, AVD/ LAS and Education, Professional and Graduate Programs

Master of Arts in Spanish Studies (C. Ortiz):

Q2: Both the Education Department and the Spanish program have received over the years numerous requests to implement a Master Program in Spanish for local area school teachers. The fact that the Spanish speaking population is growing very fast and more and more schools are demanding teachers to have higher proficiency levels in Spanish along with cultural knowledge, makes a Master of Arts in Spanish Studies a very desirable option. In addition, no other private or state university in the area offers such a degree (the closest university offering a Master program is UW-Milwaukee). Teachers find themselves into the predicament of using their summers to relocate to another state or take a leave of absence from teaching for a year or two in order to complete the Master's degree in another state. Having a Master program offered at UW-Green Bay will address the current need.

Q3: The Master Program in Spanish Studies will consist on 30 graduate credits of coursework (with different delivery systems: on-line and traditional mode as well as Study Abroad options) and a final thesis.

Q4: The coursework will be offered during the school year (night classes), summer offerings (traditional and on-line deliveries) and also Study Abroad programs for graduate credit. A person can complete the Master program in a two year cycle (The Spanish program will offer 15 graduate credits per academic year)

Q5: Spanish and Education programs will be the major contributors to the Master of Arts in Spanish Studies.

Master of Science in Nursing – Health management (S. Gallagher-Lepak):

Q2: Anticipated job growth, employers are interested in skill set (Master's level management and leadership), students interest per survey in 2009. UW System granted UW-Green Bay an Entitlement to Plan an Online Master of Science in Nursing with a Clinical Nurse Leader emphasis with course sharing with UW-Oshkosh and this program was approved through all levels of UW-Green Bay governance in 2010/2011. The proposal moved on to UW System where UW System reviewers required the program to be a "collaborative program". After consultation with UW System in January 2011, UW-Oshkosh elected not to continue in the collaboration. UW-Green Bay now needs to adjust the master's degree plan to offer a master's degree without collaboration with UW-Oshkosh. UW-Green Bay nursing faculty will continue efforts to accomplish this important goal.

Q3: 36 credits of course work (includes practicum credits) and Master's level project

Q4: Online courses; Practicum experiences arranged in students local areas with a clinical preceptor and phone/SKYPE meetings with practicum instructor

Q5: Primarily nursing courses but could include interdisciplinary graduate course(s)

Expand Master's of Social Work Program (J. Martin):

Q2: We currently admit about half of the applicants to the MSW program; among the applicants who do not have BSW degrees, we only have room to accept 1/3. We have a number of our graduating BSW students at both UW Green Bay and UW Oshkosh who would like to go right into the MSW program, but our size limitations prevents us from responding positively to most of these requests.

Q3: Expanding the MSW program would require an increase in the number of sections for all of our required courses.

Q4: We currently offer classes at night and on weekends and would continue that. In addition we offer a number of courses that are either hybrid or on-line. I would expect that we would continue to offer classes using a variety of delivery methods.

Master's Degree in History and/or Public History (K. Nielsen):

Q2: Many public school teachers (social studies) as well as regional museum workers seek graduate degrees at an MA level. Educators often want a topical focus (History) rather than an Education MA. Regional public history staff members and facilities seek expertise. UWGB has an award-winning History faculty that easily out-researches the faculty at Big Ten institutions. This would require the addition of a History faculty member capable of teaching a Public History course. Already there is a large demand on History courses, such that faculty do not have "extra" course time to give to such a program.

Q3: Coursework and an MA thesis (with faculty supervision). Students with a Public History focus would be required to do an internship rather than a thesis.

Q4: Evening courses, some web-based instruction, and some daytime course offerings.

Q5: History, Democracy and Justice Studies, HUS, and possibly Arts Management.

Master's of Public Administration (L. Warner):

Q2: This program could serve our own BA graduates along with a vast number of professionals working in local government and nonprofit organizations who seek Master's degrees. There are several opportunities for us to develop a niche - one area of expertise is Program Evaluation, something that is a challenge for local professionals to conduct at this time due to not receiving training in this skill set. Most professionals in local government or Nonprofit management now require a MPA degree to be competitive in the job market. Public and Environmental affairs departments has many graduates each year with bachelors degrees in Public Administration and the majority of them go on to enroll in Master's degree programs. The NE Wisconsin area has a large segment of the workforce in state and local government positions; despite recent cutbacks and uncertainty, the demand for government workers will remain strong due in part to retirements of baby boom professionals. The field of nonprofit management continues to grow at a rate of 3-4% a year. This rate may even increase, due to the baby boom retirement trend along with the privatization of many human services programs formerly run by government but now contracted out. UW-Oshkosh has a MPA program and in the past we have discussed partnering with them, but due to our lack of resources, we tabled our conversations a few years ago.

Q3: Coursework plus internship or thesis project. I am not familiar with the specifics of what has been discussed.

Q4: All modes would be considered, but probably alternative delivery models would be best because many students could be returning adults.

Q5: PUENAF, Political Science Possible courses offered by Social Work, Arts Management, Business, Nursing

Master of Science in Global Supply Chain Management (M. Russ):

Q2: specifics not given

The Northeast WI region is a hub of logistics and transportation industries. A master program in Global Supply Chain Management would support and also benefit from collaboration with this business community. The program would also benefit from association with a globally reputable program at the Bordeaux Business School, with whom we have a collaborative relationship for our Master's of Management program.

Master of Science in Project Management (M. Russ):

Q2: This is for a full time students can been taught in BEM and in GB- which will allow us to provide half of the faculty and give two diplomas- I talked to the EBP program director here and she is very interested- we can get in at the design stages and have some of the new proposed classes for the redesigned Master in Management to count toward the degree.

Collaborative Master's in Counseling (G. Wilson-Doenges):

Q2: The Psychology Department did an extensive study of a potential graduate program in Counseling Psychology in 2006 and determined that a stand-alone Master's in Counseling program at UW-Green Bay was not feasible and that a possible option was a collaborative Master's in Counseling.

Master's degree in Arts Management (E. Rosewall):

Q2: This graduate degree has interest and has been discussed over the past several years. Jobs with this degree are somewhat difficult to find in this region.

Master's of Sustainability Leadership (aka: online master's of sustainability management) (J. Katers; K. Fermanich):

Q2: UWEX is leading a consortium of campuses in creating an online MS in sustainability. It will build on the current online undergraduate degree. We have of the only and most established environmental science and policy MS programs in the state (region?) and have the recently established EMBI. Our campus has been involved with initial discussions concerning establishment of this new program. Faculty in EMBI and ES&P beleieve there will be a market for this type of program. Interest in the online undergraduate program (which we are not a partner) has been high.

Q3: Core Curriculum - 36 credits total (DRAFT ideas from Feb 28 meeting) 1. Advanced Sustainable Systems Thinking 2. Applied Research Data Analysis and the Triple Bottom Line 3. Geopolitical Systems – Decision-Making for Sustainability on the Local, State, and National Level 4. The Natural Environment 5. Economics of Sustainability 6. The Built Environment 7. Policy/Law and Ethics of Sustainability 8. One of these three course titles: a. Sustainable Organizations b. Triple Bottom Line Organizations c. Transforming Organizations 9. Electives - 2 3-credit courses 10. Capstone – 6 credits Capstone in lieu of thesis. Faculty approved project proposal followed by project research/implementation and reporting.

Q4: Exclusively (?) web-based.

Q5: UWGB- ES&P, NAS (math, biology, chemistry, eng., physics, geoscience), PEA (econ, polysci, etc..), BUS, possibly others (HUB, URS..) Budget model being developed by UWEX. Will be all revenue supported. ES&P will be meeting to discuss on April 15. May 12 is meeting of consortium to decide which campuses will particiapate and to begin to move a proposal forward for approval.

Master's of Urban and Community Planning/Development (R. Hutchinson):

Q2. The world is urban; in 2007 the world passed the mark where the majority of the population lives in urban places of varying size. This trend it reflective of the urban bias of economic development where urban land trumps rural land use on the urban rural fringe. Further, our lives are interwoven experiences of urbanity (even suburbs) where people depend upon urban systems and networks for their everyday physical and social sustenance; understanding this interwoven system of culture, economics, and politics requires broad training with a unifying theme of spatial interaction and coordination represented in the interdisciplinary unit of Urban and Regional Studies. The Green Bay metropolitan area is the second largest in the state of Wisconsin. According to 2010 census data, this region has continued its growth with added complexity of rapidly increasing minority populations. These demographics coupled with the continued trend of deindustrialization, the current recession, and growing energy concerns offers challenges that require training, both theoretical and technical, for developing strategies that maintain and even reimagine regional lifestyles. A Master's program in Urban and Community Planning/Development focuses on applications of theory through participatory strategies of planning in dealing with issues such as cultural diversity, economic development, energy consumption and production. It must be noted that this degree would link strongly to not only the planning, community and economic development, and non-profit professions, but also with Geospatial Technologies which was designated as a "High Growth Industry" by the Department of Labor's Employment and Training Administration in 2010.

Q3. This Master's degree would require advanced courses in the theoretical underpinnings with a direct focus on participatory processes in the applications of these theories in the profession. Additionally, technical courses of geographic information systems (GIS) would be integrated with project design and research as to keep on the cutting edge of professional skills. While the intent is to develop professionals for the domestic economy, our program would have an international component. Our current summer intership agreement with Tena, Ecuador would provide the students with hands on international experience of the planning/development process. The culmination of the degree would be a thesis that must be seviced-based in terms of providing research for a local community or group.

Q4. It is imagined that this program could be a combination of tradtional classroom meetings (flexible times) with web-based instructions. Additionally, there are the added possibilites of combining efforts with other campuses programs to suppplement some of this instruction. For example, Steven's Point has a Regioanl GIS Center that may be utilized for the training of some of the technical components of the degree. It is even imagined that a patnership program could be intitiated with UW-Oshkosh's department of Urban and Regional Studies that also lacks a graduate program.

Q5. URS, PEA, Business

The following Chairs/Directors responded that they had no interests and/or plans at this time: Human Development (K. Vespia), Accounting (M. Sagrillo), Library Science (P. Ganyard), Humanistic Studies (D. Voelker), Institute for Learning Partnership (R.Schaal).