

Appeal of Proposal to Eliminate Supply Chain Management at the University of Nevada

March 26, 2010

Introduction

This document is the appeal of the curricular review proposal to eliminate Supply Chain Management at the University of Nevada. It highlights the contributions of the University of Nevada's supply chain management (SCM) faculty to the University, the community, and the broader field of supply-chain management. Along these lines, the appeal is divided into thirteen sections:

1. *Executive Summary*
2. *Centrality to Mission*
3. *International Reputation*
4. *Connectedness*
5. *Uniqueness*
6. *Number of Majors*
7. *Student Demand for SCM Courses*
8. *Special Circumstances*
9. *Contributions to the University*
10. *Contributions to the Community*
11. *Recruiting & Placement*
12. *Research and Knowledge Creation*
13. *Conclusions*
14. *Appendices*

Additionally, several appendices are attached that demonstrate contribution to the University, community and the field of supply chain management.

1. Executive Summary:

- In a 2005 survey, the UNR Supply Chain Management program was ranked #12 in the country in a survey of academics.
- The Supply Chain Management program is central to the College of Business' ability to fulfill its Mission as a Land Grant institution, providing valuable support to a key industry.
- The field of Supply Chain Management represents high-paying, high-quality, white-collar analytical jobs.
- The SCM faculty are ranked #10 in the world in terms of research productivity, and #6 in the U.S.
- SCM faculty have brought in significant research dollars, despite the fact that historically, College of Business faculty have not been expected to bring in grant money.
- SCM faculty have brought in significant executive education dollars in comparison to the rest of the College of Business.
- The SCM faculty and the major play a key role in the economic diversification of the state of Nevada.
- SCM faculty have a strong reputation both throughout the United States and internationally.
- Eliminating the SCM major would justify eliminating 1.5 faculty positions, not 3:

- Only 30% of faculty teaching effort is spent on 400/600 courses. In those courses, non-SCM majors represent 30% of the enrollment and 600-level students (MBA students) represent 6%.
- 55% of faculty teaching effort is spent on SCM 352
- 10% of teaching effort is on 700-level BADM courses
- SCM classes are taken by many students not in the major:
 - In Spring, 2010, SCM 400/600 classes have an average enrollment of 30.
 - 63% of the students in SCM 477 Logistics Management were non-SCM majors.
 - 43% of the students in SCM 458 International Logistics are non-SCM majors.

2. Centrality to Mission:

In the proposal to eliminate the Supply Chain Management program, the centrality to the mission of the University of Nevada of the Supply Chain Management program was challenged. As a Land Grant university, the University of Nevada has a mission to meet the needs of the state, and distribution and supply chain management are key industries in the state.

Supply Chain Management represents high-paying professional careers. Microsoft's Supply Chain group is located in Reno, and as a manager there (whose supervisor is a UNR SCM alumnus) recently put it, "We don't manage the warehouse. We don't manage the people who manage the warehouse. We manage the people who manage the people who manage the warehouse." UNR SCM students are prepared for high-paying, white-collar, analytical careers.

After gaming, the logistics and supply chain management industry (which includes manufacturing and distribution) is the second largest in the state. The economic impact of the logistics industry is quite large and accounts for 22 percent of the employment in Nevada. (source: Bureau of Labor Statistics, January 2010, <http://www.bls.gov/eag/eag.nv.htm>) The Supply Chain Management program is the key outreach vehicle to this important industry sector and acts as an information consolidator for this industry.

Currently, there are some very difficult economic realities facing this sector in Northern Nevada. Faculty from the SCM program have taken a leadership position in trying to address some of the concerns of local shippers and logistics companies. Dr. Dale Rogers has been directly involved in the economic development of the logistics sector, working as an unpaid industry liaison for the EDawn, the Economic Development Authority of Western Nevada, assisting state and local governments with companies who are thinking about relocating to Northern Nevada. The reputation of the SCM program was a part of the reason that firms such as Schneider Logistics moved logistics and supply chain management operations to Reno.

Acting as a resource to the state, Dr. Rogers testified as part of the legislative study to the legislature in Carson City in relation to A.C.R. 30 (see Appendices), which is an interim study on the development and promotion of logistics and distribution centers in this State (BDR R-1305). A.C.R. 30 identifies the Supply Chain Management program as key part of the plan for economic diversification for the State of Nevada. This resolution was sponsored by Speaker Barbara Buckley in the 2009 legislative session.

In addition to positions inside manufacturing and distribution, SCM graduates and interns play an important role in other industries such as gaming. For example, one of our SCM MBA students is currently working as a purchasing intern at the Grand Sierra Resort in Reno. Every firm in the state, including companies that only sell services, have purchasing and logistics needs. Many of these companies use SCM faculty as a resource including firms such as ITS

Logistics, Microsoft, Griffin Global Logistics, Schneider Logistics, OHL Logistics and several others.

SCM faculty have developed many course offerings to respond to needs of the university and the community. Examples of this include the development of one of the first supply chain management courses in the country, SCM technology courses, quality management courses, and three different sustainability courses dating back to 2005. Dr. Rogers and Dr. Carter were the first faculty to offer a course in sustainable supply chain management in the country.

Often SCM faculty are asked to speak somewhere. In the last two years, two SCM faculty have spoken more than 10 times at zero cost to groups in the state of Nevada as part of the land grant mission of UNR. These groups include the Warehouse Education Research Council, Council of Supply Chain Management Professionals, APICS, Reverse Logistics Association, EDARN, and others.

3. International Reputation:

The proposal to eliminate the Supply Chain Management program stated that "General business degrees are central to the mission of the university, though specialty degrees are not necessarily central." If this is true, this is a significant change in philosophy from the last several years. Part of the strategy of the College of Business was to develop niche programs that could enhance the reputation of the college. This was the philosophy that led Dean Henry Amato to create the program in 1988, with strong community leadership.

In a 2005 survey of academics and professionals published in the *Supply Chain Management Review*, Rutner and Fawcett reported that academics rated the UNR SCM program #12 in the country. (Stephen M. Rutner and Stanley E. Fawcett, "The State of Supply Chain Education," *Supply Chain Management Review*, Sept. 1, 2005) Only results for the top 20 were reported, and practitioners did not rate the SCM program in the top twenty, which caused our overall ranking to fall outside of the top 20. It is worth noting that many of the other well-known programs in the rankings are part of highly ranked MBA programs (e.g. Georgia Tech, Northwestern, Harvard, Stanford), which only offer MBA concentrations in SCM, not undergraduate supply chain programs. To perform well against these high-powered MBA programs when we are focused on undergraduate education is a significant achievement.

The article specifically mentioned our program as one of several smaller regional programs that have been able to gain traction and visibility in the supply chain community. Academics were "much more likely to rank emerging schools that lacked a long tradition higher than the practitioners did." The authors believe practitioners were more influenced by the university's overall visibility and length of the program's history. They say "the fact that none of the smaller, emerging programs made the practitioner's top 20 emphasizes this divergence." In terms of visibility, a UNR undergraduate program is unlikely to compete against the likes of Northwestern, Harvard and Stanford's MBA programs.

This survey was a repetition of a survey initially published in 1995, in which UNR did not appear in the top 20. Given the program's young age at that point, it was perhaps not surprising we did not appear in the rankings. ("An Evaluation of Logistics and Transportation Professional Organizations, Programs, and Publications," Fawcett, Stanley E., Vellenga, David B., Truitt, Lawrence J., *Journal of Business Logistics*, 1995, Vol. 16, Issue 1.)

The article concludes with the following statement:

The fastest way to improve in the academic rankings is to hire well-known, productive scholars. In contrast, practitioners see schools as suppliers of management talent and place heavy emphasis on a program's curriculum and reputation. The key to improving in the practitioner rankings is to build a strong curriculum that produces capable problem solvers. Establishing a user-friendly placement program also is vital. Creating publicity and visibility for the program is the final crucial step in becoming a respected program in the minds of practitioners. Moving up the practitioner top-20 list is the more challenging task. Achieving this will require sustained effort, institutional investment, and an emphasis on relevance to real-world problem solving.

The UNR SCM program clearly has productive scholars. We have established a solid curriculum focused on problem-solving, exactly as the article recommends. Given additional time, we believe the program would continue improve in the rankings.

Among the 579 schools of business accredited by AACSB, virtually all offer degrees in the traditional areas of accounting, finance, management and marketing. Despite the strengths of those programs at UNR, given the numbers of other schools with similar programs, it is unlikely that UNR would be able to stand out among those hundreds of programs and attract the kind of regional, national and international attention that the Supply Chain Management degree program has attracted.

The Supply Chain Management program enjoys a strong reputation locally, regionally, nationally, and internationally. The program's strong reputation means that companies from across the country come to UNR to recruit our graduates. Two of the SCM faculty, Craig Carter and Dale Rogers, do work outside of the country. Dr. Rogers currently holds an appointment at a research institute in Brazil as the leader of sustainability practices, and Dr. Carter is an associate faculty member at WHU – the leading business school in Germany. These two faculty also frequently speak in other countries around the world.

Additionally, SCM faculty provide executive education programs annually with the Federal University of Rio de Janeiro. For 10 years, Dale Rogers has led groups of Brazilian and other Latin American managers on executive missions around the United States. This supports the recent emphasis by Dean Greg Mosier to focus on Latin American business operations and create partnerships with Latin American universities.

4. Connectedness:

In the proposal to eliminate the Supply Chain Management program, the connectedness of the program was challenged. The proposal said that "this program is not essential for successful completion of other programs. The faculty teaching operations research is required for Managerial Sciences degrees." In addition to SCM 352 – Operations Management – SCM faculty teach significant numbers of students from other majors in the College of Business.

352 Operations Management represents 55% of the SFTE taught by SCM faculty in the past 5 years. (See Table 1.) MBA students represent 16% of SFTE. Non-SCM students in 400-level classes represent 9% of SFTE (totaling over 68 SFTE over the period). SCM majors in 400-level, major-specific courses represent only 21% of SCM faculty SFTE.

Courses	2005	2006	2007	2008	2009	2010	Total	% Total
SCM 352	67.4	65.2	64.2	85.0	100.0	40.4	422.2	54.9
400 non-majors	8.4	10.8	10.4	12.2	17.6	8.8	68.2	8.7
400 SCM majors	34.0	34.2	22.2	23.4	34.0	19.8	167.6	21.4
MBA	19.8	11.5	21.8	24.3	32.8	14.3	124.3	15.9
Total	129.6	121.7	118.6	144.9	184.4	83.3	782.3	

Table 1 - SFTE of SCM Faculty, 2005-2010

Most SCM courses have a significant number of students from other majors in them. Over the past 5 years, 30% of the students in SCM 400-level classes have been non-SCM majors. (See Table 2.) 63% of the students in SCM 477 Logistics Management were non-majors. 43% of the students in SCM 458 International Logistics are non-SCM majors. In Spring, 2010, SCM 477 and 458 have a combined 22 non-majors in them, from Marketing and International Business alone. SCM 458/658 has been at or over capacity the last two times it was offered. In Spring 2009 there were 44 students in this class and in Spring 2010 there are 39. If the room cap set by the Fire Marshall could have been lifted this spring the numbers would be higher.

SCM 400-level courses	% Non-SCM majors
457 - Logistics Modeling Methods	19%
458 - International Logistics	43%
459 - Analysis and Design of Logistical Systems	14%
461 - Advanced Operations Mgt	13%
462 - Managing for Quality	13%
463 - Inventory Management	14%
473 - Supply Chain Management	22%
474 - Supply Management and Negotiations	20%
477 - Logistics Management	63%
479 - Advanced Logistics Systems Design and Analysis	10%
494 - Advanced Seminar in Logistics	13%
Average across all classes	30%

Table 2 - % Non-SCM Majors in 400-level SCM Courses 2005-2010

Further, SCM offers the only undergraduate course in negotiations in the College of Business, SCM 474. This is a key skill that all business students should be exposed to prior to leaving the University, yet this course is only offered through the Supply Chain Management program.

The SCM program plays an important role in the MBA program. SCM faculty teach one course in the MBA core and a breadth course. In Fall 2009, one faculty member taught a new elective breadth course in Sustainability. Additionally MBA students can take a concentration in SCM. For example, in Spring 2009, five MBA students were enrolled in SCM 658 International Logistics, and three were enrolled in SCM 463 Inventory Management.

5. Uniqueness:

In the proposal, the uniqueness of the program was challenged. The proposal said that "the department is not unique nationally, but is unique in Nevada." The program is one of six SCM programs at AACSB accredited schools in the Western United States, and one of only 49 in the US (out of 579 accredited schools). It is also only one of 13 AACSB accredited universities to

receive AST&L certification for its graduating SCM majors. It is our understanding that one of the reasons that UNLV dropped its SCM major was because of the strong program at UNR.

Clearly, the SCM program is more unique than any of the others in the College of Business. However, it would seem that the goal of uniqueness would clash with the statement in the proposal to eliminate the SCM program that "General business degrees are central to the mission of the university, though specialty degrees are not necessarily central." It is unlikely that general business degrees would ever be unique either regionally or nationally. Certainly, they would not be as unique as the supply chain management program.

6. Number of Majors:

One of the primary factors considered in the recommendation to eliminate the program is the number of majors. There are several systemic reasons why the major has been small:

- Students don't come to college knowing what SCM is. They have heard of marketing, finance, accounting, etc., but they have never heard of SCM.
- Once at UNR, there are no 200-level SCM courses to introduce students to the subject.
- SCM 352, the only required SCM course, is taken after the students have reached junior standing, and have already declared their majors.
- Due to accreditation requirements, the content of SCM 352 does not give students an accurate preview of the kinds of things they would be doing in the major.

Additionally, the major is perceived among students to be difficult, which the faculty believe is an accurate assessment. However, the strength of the students who do complete the major is what has made the program so successful at placing our graduates in desirable positions. Supply Chain Management has never been a large major, but given the strength of the program's reputation and success in placing graduates, there was an understanding that the program was viewed as valuable, despite the relatively small number of majors.

Currently, 42 students are enrolled in the major. Figure 1 shows the number of declared majors over the past 17 years. The number of majors was at 70 for an extended period of time. Starting in 2003, the number began to decline. In 2006, the faculty began to take measures to increase the number of majors, as will be described below. As the graph shows, the number has begun to recover.

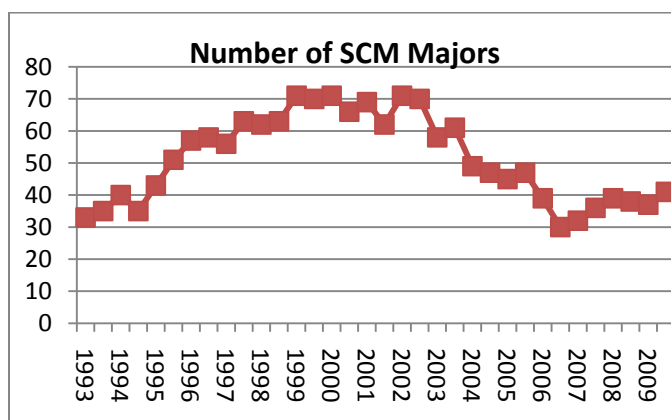


Figure 1: Number of SCM Majors, 1993-2009

There are a number of reasons that contributed to the decline in the numbers of majors, but many are related to the Common Course Numbering (CCN) mandate in 2002.

- Prior to CCN, logistics classes were listed under MGRS, and students looking for an elective course at a particular time slot would find the SCM courses, and some of those students would end up changing their major to SCM.
- At the time of CCN, we also made the decision to rename the program "Supply Chain Management," from "Logistics." We did this in response to pressure from the recruiters who hire our students. People in industry were increasingly using the term Supply Chain Management, and using the term Logistics gave the incorrect impression that the program was not keeping up with best practices.
- Unfortunately, college students most likely have some idea of what the term "Logistics" means, from general usage of the word, but they've never even heard the words "Supply Chain Management" before, and this had a significant impact on the number of majors.

In order to try to attract more majors, the SCM faculty have taken a number of steps:

- For several years, Dr. Rogers has spoken about Marketing Channels, which is a part of SCM, to MKT 210 Introduction to Marketing classes, to give those sophomore students some introduction to SCM. Some of our strongest students were introduced to the program that way.
- There were a few 400-level SCM courses that had other 400-level SCM courses as pre-requisites. To make our courses as accessible as possible for other students to register for, we made 352 the only pre-requisite for all of the 400-level courses we are offering.
- Dr. Rogers has spoken to numerous groups of high school students and honor students, trying increase awareness and interest in the major to students entering UNR.
- Also, in these and other settings, we have been using the term "Logistics and Supply Chain Management." Companies spend make great efforts to build up their "brand equity," and by dropping Logistics from our program title, we made a mistake.

Some further actions that the faculty would consider undertaking in the future to further increase the number of majors would include:

- Looking at accreditation requirements to see if a reconfigured version of SCM 352 could be offered at the 200-level. This would give sophomore students an introduction to the major before they had to declare a major.
- If accreditation requirements would allow, this course could be re-designed to be more representative of the focus of the major, and less on quantitative tools like linear programming.

As Figure 1 shows, these efforts taken to date have resulted in the number of declared majors increasing. Figure 2 shows the number of majors, by year.

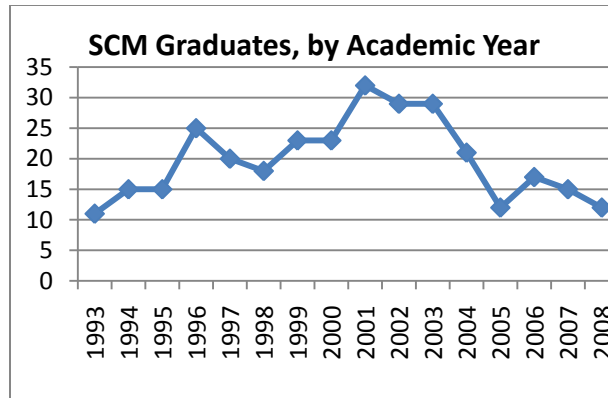


Figure 2: Number of SCM Graduates, 1993-2009

The number of majors has not rebounded as the number of majors has, but that is not surprising, because there will be a lag of several semesters between the time that a student declares a major and the time those students graduate. As one example, SCM 461 Advanced Operations Management is offered every year, and in Spring 2010, there are 30 SCM majors in the class.

We believe that by taking the steps described, we should be able to further increase the number of majors and graduates. However, we believe that the number of majors alone should not be the only consideration. As we show below, our 400 level class enrollments are slightly higher than the College average.

7. Student Demand for SCM Classes

In addition to the number of majors, the central argument in the proposal to eliminate the SCM program is because "This faculty has some of the lowest credit hour generation in the College of Business." In order to justify eliminating the program, it would seem that student demand for courses should be a key consideration. In this section, we look at demand for 300, 400, and 700-level SCM courses, and show that enrollments are currently slightly above the average for the College.

SCM 352 is required of all College of Business majors, and the Provost's proposal recommends retaining two faculty members to teach SCM 352. The only criticism we have heard regarding SCM 352 over the years is that not enough sections have been offered. The complaint was that we were not offering the desired minimum of 400 seats. As Figure 3 shows, our efforts to increase the number of available seats of 352 have been successful, and for the last two years, we have exceeded the target. In 2009, 500 students took SCM 352.

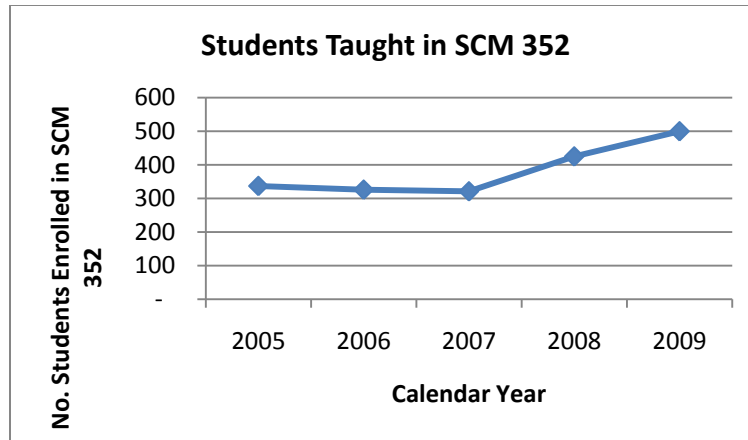


Figure 3: Number of Students in SCM 352

Our sections of SCM 352 are full, and the 700 level courses are managed by the Associate Dean of the College of Business. Each semester, we teach BADM 701, a required course for MBA students, which typically has enrollments in the 30s. At his request, we offer an SCM breadth course for MBA students, and in Fall, 2009, a special topics course on Sustainability was offered by an SCM faculty member. These courses have met sufficient enrollments for the Associate Dean's satisfaction, and have been offered.

If SCM 352 has enough students, and 700 level classes have enough, the only other thing to consider is the number of students in our 400/600 level classes.

As described above, 400 level SCM courses service a large number of students from other majors. This is part of the reason why, on average, there are 30 students in 400-level SCM courses, as Figure 4 shows. For some time, the number of students in our 400/600 SCM courses was declining and below the average for the College of Business. The faculty made a number of changes to our course schedule to address the situation. The number of students in our sections has increased dramatically over the past three years. As a result, the average number of students in SCM 400/600 classes in Spring 2010 (30.0 students), is in fact slightly larger than the CoB average of 29.5

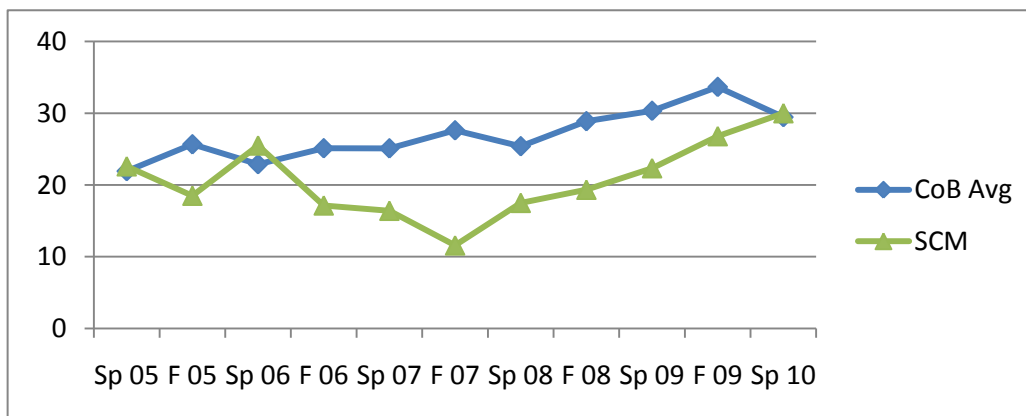


Figure 4: Number of students per SCM 400/600 section, 2005-2010

To further demonstrate that SCM course enrollments are well within the normal range for the College of Business, Figure 5 shows the average number of students for each 400/600 section, broken out by the different academic areas in the College.

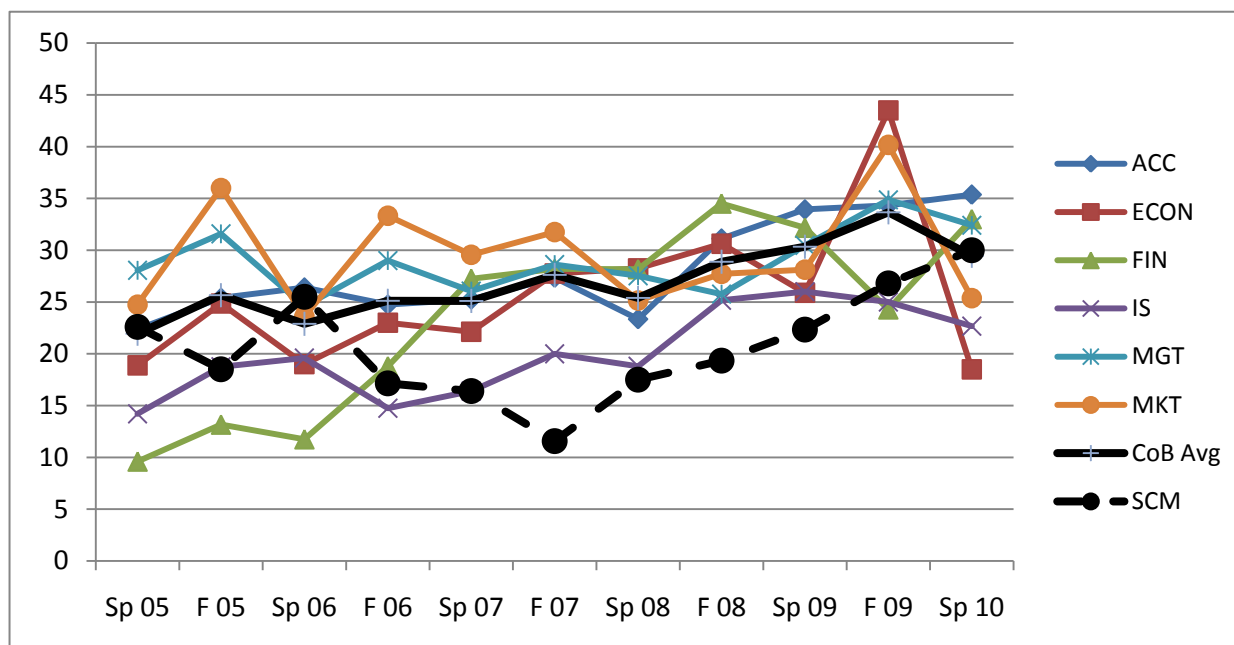


Figure 5: Number of students per SCM 400/600 section, 2005-2010

Since our number of students is above the College average, the number of students in our sections is more than the number in half of the areas in the College. The lines for SCM and the CoB average are highlighted, and we have intentionally made it not easy to distinguish which areas the other lines represent, because our intent is not to show that we are better than any particular area. Our intent is simply to show that the number of students in our 400/600 classes is well within the normal range for the College of Business.

The conclusion we feel must be made is that based on student enrollments in classes, there is no evidence to justify eliminating the SCM 400/600 level courses, and thus no evidence for eliminating the major.

8. Special Circumstances:

In the proposal, the SFTE taught by SCM faculty was challenged. The proposal said that "most of the SFTE of the supply chain management faculty can be retained by recognizing operations research as a requirement for managerial sciences degrees." As Table 1 shows, SCM 352 Operations Management makes up the bulk of the SFTE because it is a core upper division undergraduate business class, but SCM faculty also teach significant SFTEs in the MBA program. Only 22% of our SFTEs are from SCM majors, and Figure 3 shows, this is not because there are no students in our 400-level classes. On the contrary, our 400-level classes are full, thanks in part to the changes the faculty have made in recent years.

The proposal to eliminate the major recommends retaining two faculty. Seventy-eight percent of our FTEs come from non-SCM majors. It is difficult to see how two faculty members could do nearly 80% of the work currently done by five.

9. Contributions to the University:

Recent research project and executive education revenues have been the following:

1. Value Project \$25,000 from Genco Logistics
2. Sustainable Supply Chain \$50,000 (so far) from Kenco Logistics. Plus, \$68,000 has been funneled through the SBDC to pay for the undergraduate research assistants for a total of \$118,000.
3. Reverse Logistics Executive Council - \$5,687. The \$5,000 came from Philips Electronics in Atlanta. The rest of the money came from book revenues from Amazon.com and other book buyers.
4. WSPPN - Spring 2009 - Funding of a half-time research assistant and a percentage of Dale Rogers time for Spring 2009.
5. Executive Education Courses - since July 1, 2006 the gross revenues for the Brazilian courses is \$178,838.00.

Except for one year, we have had 100 percent student placement upon graduation for the last 20 years. According to a salary survey from 2005, SCM undergraduates from the University of Nevada earn approximately \$10,000 more than other majors from the College of Business.

Additionally, the impact that the research of the SCM faculty has upon the reputation and image of the University has been important.

SCM faculty serve on various University committees including Sustainability, NCAA Oversight and Compliance, Graduate Studies Council, etc. In the Spring of 2009, we completed a funded research project with Kevin Dick, WSPPN, and the SBDC related to alternative energy for truck fleets.

10. Contributions to the Community

The Supply Chain Management major fulfills the hiring needs of local organizations by placing high quality SCM majors in internships and full time positions upon graduation. While the number of supply chain management graduates is small, these students typically receive the best salaries in the college of business. At the time of the last salary survey in the College of Business, supply chain management graduates earn approximately \$10,000 on average more in salary than graduates from any other major in the College.

The supply chain management program has a strong partnership with supply chain management professionals in the region.

Drs. Rogers, Lembke, and Carter have all been highly involvement in the local CSCMP Roundtable and all three are past officers, including past presidents.

In the Spring of 2009, we completed a project with Kevin Dick, WSPPN, and the SBDC related to alternative energy for fleets.

Faculty are also actively involved in helping firms recruit Supply Chain Management majors. The majority of companies recruiting for logistics and supply chain management came through a connection to faculty in the Supply Chain Management Area.

Logistics faculty have been running internship programs since 1991. Nearly 200 students have

been placed in internships around the country, but primarily in Northern Nevada. These programs have helped students at the University of Nevada and many other universities place students in Northern Nevada and around the world. Many students have been placed in Northern Nevada as is depicted in Table 3 in the Appendices. Other students have been given internships around the country with firms such as Chrysler, Ford, Phillip Morris, Unisys, AMD, and numerous others.

Currently, the faculty from the Supply Chain Management program are working with local companies such as Griffin Global Logistics, Schneider Logistics, and several others to address economic threats to the logistics industry in Northern Nevada. There are several serious problems facing the region including changes in the distribution flow patterns in the United States and infrastructure issues. This project was started in January 2009 and is expected to be finished in 2010. Also, Dr. Rogers' International Logistics class completed a study in Spring 2009 for Microsoft Supply Chain Management on strategies for Latin American sourcing.

Supply Chain Management classes have completed projects for several companies including Coca-Cola, Microsoft, Dell, EDAWN, Skagen, Target Stores, Kmart, Advanced Micro Devices and many other firms. These projects have led to employment for 25 students.

11. Recruiting & Placement

The Supply Chain Management program has attracted many firms both in Nevada and across the country to recruit at the University of Nevada. The Supply Chain Management program has a reputation of being one of the top programs in the United States. More than any other program in the College of Business, recruiters want to hire SCM graduates. Table 3 (in Appendices) lists the employers who have recruited our graduates over the years, and the number of alumni currently working for the company. Of the graduates whose current location is known, over fifty percent were employed in Nevada.

SCM faculty, primarily Dr. Rogers, have taken a great deal of effort to help our students find employment upon graduation. In addition to the strengths of the students graduating which have fostered the program's reputation, this faculty involvement is a major reason why placement rates and salaries have been so high, as mentioned above.

12. Research and Knowledge Creation

The Supply Chain Management faculty at the University of Nevada were ranked 10th in the world for SCM research output in an article in the *Transportation Journal* (2009, Vol. 48, No. 1, p. 51). We are also ranked 6th in the U.S. This placed the University of Nevada ahead of several "powerhouse" universities with much larger SCM faculties and programs, including The Ohio State University, Pennsylvania State University, and Texas A&M.

The SCM faculty are among the most cited by other authors. According to Google Scholar, two SCM faculty have the most cited publications in the College of Business and another SCM faculty member is next in the number of citations for one of their works. One faculty member's paper, published in 2001, as of 2007 was still one of the 20 most-frequently downloaded papers from the *International Journal of Physical Distribution and Logistics Management* website.

Clearly, the SCM faculty at the University of Nevada have an impact on their discipline.

The SCM faculty sit on the review boards of the most prestigious journals in the field, including

the *Journal of Operations Management*, *International Journal of Logistics Management*, *International Journal of Physical Distribution and Logistics Management*, and *Journal of Supply Chain Management*. In addition, one of the SCM faculty serves as the Co-Editor-and-Chief of the *Journal of Supply Chain Management* – a position that involves between 500 and 700 hours per year of service to the discipline and brings enormous prestige to the University. The *Journal of Supply Chain Management* is the leading interdisciplinary SCM journal in the field, with articles published by world renowned scholars in SCM and related fields, including Oliver Williamson, Greg Dess, Shelby Hunt, Gary Fraizer, Aleda Roth, Tom Mentzer, and Steve Borgatti.

The SCM faculty have won several awards relating to this research. Recent awards include best reviewer awards for the *Journal of Operations Management* and *International Journal of Physical Distribution and Logistics Management*, and the best paper award for the *International Journal of Physical Distribution and Logistics Management*.

The knowledge that is generated by the SCM faculty is not only published in the leading scholarly journals in the field, but has a strong and direct impact on managerial practice. Their research has been published as white papers and focus studies by CAPS Research and has been highlighted in major trade publications and media outlets including *Inside Supply Management*, the *USA Today*, *Fox News*, and *National Public Radio*, *The New York Times*, *The Wall Street Journal*, and many trade journals.

In addition, the SCM faculty are regularly invited to speak to managers and executives throughout the world. Just in 2009 SCM faculty spoke at the annual CAPS Research Executive Roundtable, Institute for Supply Management's Annual Conference, CSCMP Annual Conference, CSCMP Roundtables both domestically and internationally, ILOS (Brazil) events, Enfasis (Argentina and Mexico) events and corporate conferences sponsored by individual companies.

Research has also been funded by CAPS Research, Kenco Logistics, Genco, Philips Consumer Electronics, IBM, Sun Microsystems and many others. Dr. Carter received a CAPS grant in 2008 for \$141,000 and the Kenco Logistics funding has been \$110,000 thus far. This funding has allowed the Center for Logistics Management to fund MBA and undergraduate research assistants. The involvement of these students in SCM research has largely been a symbiotic relationship, providing benefits to the SCM faculty in terms of additional research resources and invaluable experience to the student researchers.

One MBA student researcher, Rudi Leuschner, published three papers with SCM faculty while at the University of Nevada; the impact of his experiences was so strong that he decided to change his career path, and is currently completing a Ph.D. in SCM at The Ohio State University. Two undergraduate students, Zachary Rogers and Tad Kelly, have co-authored a refereed journal article and a refereed conference proceeding with SCM faculty based on their research involvement with the Center for Logistics Management; both of these students are pursuing advanced degrees with an emphasis on SCM, again based largely on their research experiences with the SCM faculty.

13. Conclusions:

Student demand for 400/600 level SCM classes is higher than average in the College of Business. The number of majors is smaller than other majors, but it has been recovering, and our classes are full. Clearly there is demand for SCM courses. If our major is to be eliminated

because our enrollments in 400/600 classes are too small, then it would seem that half of the areas in the College of Business would also need to be eliminated.

The program is highly regarded nationally, ranked #12 in the country by academics, and the faculty rank #10 in the world in terms of research output.

The Center for Logistics Management and the Supply Chain Management faculty have always viewed their roles as being strong researchers and a key part of the College of Business Administration's community outreach. SCM faculty have played a key role in the community and are an important part of the economic diversification of the state of Nevada.

The land-grant mission of the University of Nevada is to support the local and regional economy. Faculty attached to the SCM program have been an important part of the outreach of the College of Business. All programs and project decisions of the SCM faculty include consideration as to whether the proposed program or project reflects the University of Nevada's land-grant mission.

The Supply Chain Management Group and the Center for Logistics Management are cost effective. Since its inception in 1988, the Center for Logistics Management has been funded through donations, executive education, events, and projects granted by private companies with the exception of an original donation in 1988 by the University of Nevada to help get the Center started. All funding currently comes from soft monies derived from Executive Education programs, donations, and research projects. Faculty work on projects and educational programs as an addition to, and not as part of, their normal faculty workload.

The Supply Chain Management program is worth saving. The faculty that are going to have to leave if the program is cut are productive and good colleagues. They are among the most visible off-campus of all of the College of Business faculty, and they have put in much effort to enhance the reputation of the College and the University of Nevada around the world. To quote Gary Mayfield, CEO of Kenco Logistics in Chattanooga, Tennessee, "It doesn't seem to make much sense to get rid of a program that is one of the most recognized in the entire University." Please find a way to keep this strong program.

14. Appendices - Supporting Data

1. Table 3 - SCM Graduate Placements
2. Table 4: Research Productivity of worldwide Supply Chain Programs.
3. 2009 Nevada Legislature Assembly Concurrent Resolution 30
4. Letters of Support from business leaders and alumni

TABLE 3 - SCM Graduate Placements

Company	Location	# Students	# in NV
Advanced Micro Devices	Austin, TX	8	0
Alibris	Sparks, NV	1	1
Amazon	Fernley, NV	3	3
Anderson Merchandisers	Reno, NV	3	3
Anixter Inc.	Reno, NV	2	2
Apple	Cupertino, CA	4	0
Arrow Electronics	Reno, NV	7	7
Aventis	Sparks, NV	4	4
Baker & Taylor	Reno, NV	4	4
Bender Warehouse Co.	Reno, NV	7	7
Bently NV	Reno, NV	2	2
Carrier Air Conditioning	Sparks, NV	1	1
CEVA Global Logistics	Sparks, NV	4	4
Chrysler	Detroit, MI	8	0
Cintas Corp.	Reno, NV	2	2
Coca-Cola	Orlando, FL, Atlanta, GA, Houston, TX	10	0
Craftman Press West	Sparks, NV		0
Dell Computer	Sparks, NV	7	7
Dreyer's Grand Ice Cream	Oakland, CA, Los Angeles, CA	4	0
DSC Logistics	Chicago, IL, San Ramon, CA	7	0
Emhiser Research Inc.	Reno, NV		0
FedEx	Memphis, TN	2	0
Flextronics	San Jose, CA		0
Ford	Detroit, MI	13	0
Frost King	Reno, NV		0
GENCO	Pittsburgh, PA, Atlanta, GA	2	0
GM - LA	Los Angeles, CA		0
GM - Reno	Reno, NV		0
GMSPPO	Sparks, NV	4	4
Griffin Global Logistics	Sparks, NV	6	6
Henry Schein	Reno, NV	7	7
HP	Roseville, CA	3	0
IBM	New York	2	0
IGT	Reno, NV	15	15
Ingram Micro	Santa Ana, CA	7	0
Intel	Folsom, CA	6	0
its Logistics	Sparks, NV	5	5
J.C. Penney	Stead, NV, Plano, TX	7	0
Kal Kan	Reno, NV	5	5
Leviton	Sparks, NV	4	4
Logitech	Fremont, CA	1	0
Mazda	Los Angeles, CA	2	0
Menlo Logistics	Menlo Park, CA	4	0
Mervyn's	Salt Lake City, UT, Sacramento, CA	4	0
Microsoft	Reno, NV & Redmond, WA	14	12
MinuteMaid	Houston, TX, Orlando, FL	8	0
Musslewhite Trucking, Ltd.	Reno, NV		0

Nintendo	North Bend, WA	1	0
OHL Logistics	Reno, NV	12	12
Oracle	Newark, CA		0
Parts Unlimited	Reno, NV		0
Paxton / Jeld Wen	Sparks, NV	4	4
Pepsi	Dallas, TX	4	0
Perrier Group of America	Dallas, TX	6	0
Philip Morris USA	Richmond, VA	7	0
Porsche Cars North America	Reno, NV	4	4
Ranshu Inc.	Reno, NV		0
Reno-Tahoe Airport	Reno, NV	5	5
RR Donnelly	Reno, NV	6	6
SB Power Tools	Reno, NV		0
Schneider Logistics	Reno, NV	6	6
Sherwin-Williams	Reno, NV	8	8
Sierra Army Depot	Herlong, CA	6	0
Skagen Designs	Reno, NV	5	5
Starbucks	Minden, NV	5	5
State Farm Insurance	Reno, NV	2	2
Sun Microsystems	Denver, CO	11	0
Symbol Technologies	NY	1	0
Target	Reno, NV, Sacramento, CA	8	4
Toyota	Chicago, IL, Los Angeles, CA, Toronto, Ont	5	0
Toys R Us	Stockton, CA	2	0
Universal Cycles	Reno, NV		0
UPS	Reno, NV, Sacramento, CA & Atlanta, GA	18	8
USF Logistics	Chicago, IL	2	0
Wagner's Distributing	Reno, NV		0
Walmart	McCarran, NV	5	5
	Totals	342	179

Table 6. Modified Ranking of Schools by Number of Articles in Transportation and Logistics Journals for 2005-07

Weighted Rank 2005-2007	University	Number of Articles	Weighted Number of Articles	Unweighted Rank 2005-2007*
1	Cranfield University	24	11.17	2
2	Cardiff University	21	9.58	4
3	Michigan State University	31	9.45	1
4	University of Tennessee	24	9.33	2
5	University of Maryland	21	8.00	4
6	Arizona State University	20	7.67	6
7	Imperial College London	13	6.08	10
8	Lund University	9	5.92	22
9	University of Alabama	18	5.68	7
10	University of Nevada, Reno	12	5.42	12
10	Iowa State University	9	5.42	22
12	University of Leeds	6	5.33	NR**
13	University of Oklahoma	18	5.27	7
14	National Chiao Tung University	9	5.17	22
15	Ohio State University	11	4.58	15
16	John Carroll University	7	4.50	NR
16	National Central University	11	4.50	15
16	Pennsylvania State University	11	4.50	15
16	University of Oregon	8	4.50	NR
20	Texas A & M University	14	4.42	9
21	Helsinki University of Technology	12	4.25	12
22	Chalmers University of Technology	9	4.17	22
22	Monash University	7	4.17	NR
24	Copenhagen Business School	8	4.08	NR
24	Florida State University	13	4.08	10

* From Table 2.

** NR: Not ranked in unweighted top 25 from Table 2.

Table 4: Research Productivity of worldwide Supply Chain Programs.

Carter, Craig R., P. Liane Easton, David Vellenga, and Benjamin J. Allen (2009), "Affiliation of Authors in Transportation and Logistics Academic Journals: A Reevaluation," *Transportation Journal*, 48(1), pp. 42-52.

ASSEMBLY CONCURRENT RESOLUTION NO. 30—
ASSEMBLYWOMAN BUCKLEY

MAY 5, 2009

Referred to Committee on Elections, Procedures, Ethics,
and Constitutional Amendments

SUMMARY—Directs the Legislative Commission to conduct an interim study on the development and promotion of logistics and distribution centers in this State. (BDR R-1305)

EXPLANATION - Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.

ASSEMBLY CONCURRENT RESOLUTION—Directing the Legislative Commission to conduct an interim study on the development and promotion of logistics and distribution centers in this State.

- 1 WHEREAS, The creation of new jobs and promoting
- 2 diversification of the Nevada economy is a critical need and an
- 3 overriding goal of the Legislature; and
- 4 WHEREAS, Nevada is uniquely positioned by virtue of its
- 5 location and favorable business climate to serve as a logistics and
- 6 distribution center for the receipt, shipment and assembly of goods
- 7 on the West Coast to points north and east; and
- 8 WHEREAS, The Nevada System of Higher Education, including
- 9 the state universities in Reno and Las Vegas, has expertise in supply
- 10 chain management and can provide consulting support, managerial
- 11 development through degree programs and job training
- 12 opportunities; and
- 13 WHEREAS, Foreign trade zones exist in both southern and
- 14 northern Nevada for the purpose, among other things, of facilitating
- 15 the growth of logistics and distribution centers; and
- 16 WHEREAS, The proposed Ivanpah Valley Airport in Clark
- 17 County, the Tahoe-Reno Industrial Center in Storey County and the
- 18 Reno-Tahoe International Airport are poised for future development
- 19 as logistics and distribution centers and for the creation of a wide
- 20 range of jobs in supply chain management; and



1 WHEREAS, The Elko County Rail Port provides additional
2 opportunities for east-west distribution of goods and development of
3 a logistics cluster; now, therefore, be it

4 RESOLVED BY THE ASSEMBLY OF THE STATE OF NEVADA, THE
5 SENATE CONCURRING, That the Legislative Commission is hereby
6 directed to appoint a subcommittee to study the development and
7 promotion of Nevada as a logistics and distribution center; and be it
8 further

9 RESOLVED, That the subcommittee shall formulate a strategy
10 and develop an implementation plan detailing the steps that need to
11 be taken to create and promote the further development of Nevada
12 as a logistics and distribution center which must include, without
13 limitation:

14 1. Identification of barriers to the development of logistics and
15 distribution centers;

16 2. Delineation of future foreign trade zones;

17 3. Prioritization of infrastructure needs, including energy and
18 water;

19 4. Formation of public-private partnerships for financing and
20 incubation of new businesses;

21 5. Attraction of businesses associated with supply chain
22 management activities, including assembly, manufacturing,
23 warehousing and transportation; and

24 6. Identification of strategic public policy actions to expedite
25 the investment of private development companies in major logistics
26 centers in Nevada; and be it further

27 RESOLVED, That the Legislative Commission shall submit a
28 report of the results of the study and any recommendations for
29 legislation to the 76th Session of the Nevada Legislature.