

## ACADEMIC PROGRAM PROPOSAL FORM

(Revised May 2014)

**DIRECTIONS**: Use this form when proposing a new major or primary field of study, new emphasis, or new degree program.

DATE SUBMITTED:	Date of AAC Approval:			
INSTITUTION: TMC	April 17, 2015			
REQUEST TYPE:	<ul><li>☐ New Degree</li><li>☒ New Major or Primary Field of Study</li><li>☐ New Emphasis</li></ul>	Date of Board Approval:		
<b>DEGREE</b> (i.e. Bachelo				
MAJOR (i.e. Animal S				
EMPHASIS (i.e. Equin	e Studies):			
CREDITS TO DEGRE	EE: 60			
PROPOSED SEMEST				

### **Action requested:**

The academic program proposal seeks approval for Truckee Meadows Community College to offer a baccalaureate degree in Logistics Operations Mangement.

### A. Brief description and purpose of proposed program

The proposed program will be an Logistics Operations Management Bachelor of Applied Science degree which provides students with the technical expertise and knowledge needed to meet the Northern Nevada operations and logistics industry technical workforce needs. The program is designed to offer a four-year degree option focused on the critical skills needed in the logistics workforce. This program prepares students in the areas of manufacturing, operations, logistics and supply chain through an industry-driven curriculum encompassing such areas as manufacturing processes, quality principles, warehousing, sustainability, safety, and operations planning and control. Students in the program are given the skills and knowledge of how to manage both material and information flows in complex environments. The Logistics Management AAS and Operations Systems AAS are feeder degrees to this program. This degree responds to employer's expressed needs to have a well-qualified logistics operations workforce trained and ready to meet workforce demand, thus ensuring long-term economic success for the region. The addition of a BAS degree would complete the educational pathway for this important business sector's workforce.

### B. Statement of degree or program objectives

Graduates of the Bachelors of Applied Science in Logistics Operation Management will be able to:

- •Identify the underlying principles of the role of logistics operations management within businesses.
- •Apply the concepts of the professional skills and competency in logistics operations management, such as transportantion, procurment, operations design, supervision and management, safety, and warehousing.
- •Work as logistics operations professionals within one or more of the job categories related to this field.

## C. Plan for assessment of degree or program objectives

Degree and program objectives will be assessed in accordance with established College requirements, including the use of data from student course evaluations, and surveys of graduates and employers. Additionally, the two capstone courses - Field Study and Research, and Logistics Operations Management Internship - will be used to asses the overall effectiveness of the program.

# D. Plan for assessment of student learning outcomes and the use of this data for program improvement

Student learning outcomes will be assessed as part of the College's overall assessment cycle and be held to the same reporting requirements as all other Student Learning Outcomes (SLOs). This includes faculty, department chair, dean, and advisory board review of data collected through the Course Assessment Report and Program Unit Review processes. At the time of writing, Advisory Board member include:

Name Company Position/Title Sam Humphries Urban Outfitters Talent Manager

Andrew Duty Amazon Facilities Area Manager

Michael Borne Ardagh Group Plant manager
Pieter Droog ProNet Branch Manager

Dan Oster NAI Alliance Senior Vice President & Partner

Barry Duplantis IGT Senior Analyst, Global Trade Compliance

Michael Pender Porous Power Technologies Managing Director

Alvin Bolton Nevada Army National Guard Logistic Management Officer

Neil Oscarson Nevada Army National Guard State Training Officer
Art Arana Amazon Facilities Area Manager

Toby Eck High Quality Organics SR VP of Supply Chain Operations

Chris Bender Bender Group CEO

Helmuth Lehmann Management Consultant

## E. Contribution and relationship of program objectives to

### i. NSHE Master Plan

NSHE highlights a number of goals, which are aligned with the overall State goals, in it's Master Plan. This program will contribute to many of these goals, including: producing more graduates who are workforce ready (nor only for Tesla jobs, but for all of the Teslas supplier/support companies jobs and secondary tier jobs), creating closer ties to the business community, which may result in more external funding and internship/career pathways for students, more intense

use of existing buildings, and Affordability as more students will have a bachelors degree option that is significantly less than those offered at the Universities.

In addition, the Board of Regents of the Nevada System of Higher Education voted to close the UNR Suppl;y Chain Management (SCM) program on June 4th, 2010. The elimination of UNR's BS-SCM degree, left Nevada with no four-year degree option in logistics/supply chain management. The logistics industry business community has requested an applied four-year degree option with the aim to up-skill their current workforce and from which to hire their future workforce. This proposed program is structured to fill the workforce educational/training gap forecast for northern Nevada in the next ten years.

### ii. Institutional mission

The institutional mission is: Truckee Meadows Community College promotes student success, academic excellence and access to lifelong learning by supporting high-quality education and services within our diverse community. The proposed program will provide students the opportunity to be successful in their educational endeavors as well as their career goals. The structure of the programs allows for students who earned their AAS degrees to return and further their educational pursuits.

## iii. Campus strategic plan and/or academic master plan

The proposed program will strengthen and reinforce TMCC's commitment to providing a well educated and prepared workforce for northern Nevada as well as providing a diverse population access to a necessary and pertinent program for the region. TMCC's Master Plan has a number of themes and inititives to which this program will contribute, including:

Core theme 1, Strategic Initiative 3 - Create, expand and/or strengthen partnerships with civic, community, educational and business/industry organizations to provide lifelong learning opportunities.

Core theme 2, Strategic Initiative 3 - Regularly assess the skills needed to meet workforce needs in the service area.

### iv. Department and college plan

The Division of Business is committed to working with the business community to ensure a well prepared, pertinent workforce is available. The proposed program responds to our goal of providing programs that reflect the current and anticipate future workforce needs of the northern Nevada community.

## v. Other programs in the institution

The program is structured so that the AAS in Logistics Management (Business) and the AAS in Production Systems (Manufacturing) are feeder programs. After the UNR BS-SCM degree was eliminated, there was no four-year option in the logistics area at a time when the economy hit a nearly 80-year low. This adversely affected the enrollment in our logistics degrees due to confusion in the industry and amongst students; many believed that there was no longer any logistics education options available and the job prospects dropped significantly from the pre-recession estimates. The proposed program will revitalize the program, provide an advanced educational option for students, and respond to the growth economy the region is currently experiencing by preparing the requisite workforce.

## vi. Other related programs in the System

If a student who earned an AAS within the system would like to declare this degree, his/her transcripts will be evaluated and completed coursework would be applied as appropriate.

Therefore, although there is no directly related program within the System, all AAS students could be served by this proposed program.

## F. Evaluation of need for the program

## i. Intrinsic academic value of program within the discipline

The proposed program will complete the educational pathway for a career pathway in the Logistics Management and Production Systems education currently provided at TMCC.

# ii. Evidence of existing or projected local, state, regional, national and/or international need for program

Data supporting strong job growth were delivered at a GOED presentation to the GWIB Logistics and Operations Sector Council in October 2014. The analysis stated this year's Nevada Logistics and Operations sector grew by 3.7% and that growth is expected to continue over the next decade at an average annual rate of 1.5%; outpacing that of the nation. In addition, by 2017 employment levels in the state's Logistics and Operations sectors are expected to return to the pre-recession high of 83,000. The forecasted job growth from 2014 to 2024 totals 35,936 new Logistics and Operation sector jobs. Logistics is one of the target industries identified by the Brookings report and also in the State of Nevada's Governor's Office of Economic Development's Moving Nevada Forward: A Plan for Excellence in Economic Development. The lack of a four-year degree offering in the State seems to be counterproductive to the goals presented by GOED. The logistics industry business community has requested an applied four-year degree option with the aim to up-skill their current workforce and from which to hire their future workforce.

## iii. If this or a similar program already exists within the System, what is the justification for this addition

There are no similar programs that exist within NSHE.

## iv. Evidence of employment opportunities for graduates (state and national)

For State figures, please see F.ii.

National figures please see attached.

## v. Student clientele to be served (Explain how the student clientele is identified)

Student clientele would be recruited from completers in the current TMCC AAS Logistics Management and AAS Production Systems programs, existing industry workforce (as requested by the industry for upskilling), high school students, and the general local population. Potential students will be identified by College Advisors, high school Counselors, employers, and self-identified in the general population.

### G. Detailed curriculum proposal

# i. Representative course of study by year (options, courses to be used with/without modification; new courses to be developed)

The Logistics Management AAS and Operations Systems AAS are feeder degrees to this program. Students' Year 3, Semester 1 classes are dependent on the AAS they earned. The proposed BAS curriculum was developed with considerable input from the Advisory Board referenced in Section D.

## IF ENTERING 3RD YEAR HAVING COMPLETED PRODUCTION SYSTEMS AAS:

Course Credits LGM 210 – Studies in Procurement and Logistics* LGM 212- Transportation Management* 3 LGM 209- Logistics and Quality Management tools* LGM 202 – International Logistics Management* LOM 320 - LOGISTICS SECURITY 3 Total Credits 15	3 3 3
OR	
IF ENTERING 3RD YEAR HAVING COMPLETED Course Credits MPT 140- Quality Control* 3 MPT 110 – Introduction to Production Concepts* MPT 135 – Materials Handling* 3 DFT 110 – Print Reading for Industry* 3 LOM 320 - LOGISTICS SECURITY 3 Total Credits 15	LOGISTICS MANAGEMENT AAS:
REQUIREMENTS – YEAR 3 SEMESTER 2 - All Cor Operations Applied Statistics (listed above) will be nev	
Course Credits BUS 330 - BUSINESS PRESENTATIONS 3 SCM 352 - OPERATIONS PLANNING, CONTROL A LOM 340 - PRODUCTION & LOGISTICS INFORMA SCIENCE GE LAB REQUIRED 3 (4) LOM 330 - WAREHOUSING 3	
Total Credits 15	
Year 4 Semester 1	
Course Credits LOM 410 – FINANCE AND BUDGETING 3 LOM 420 - SAFETY & RISK MANAGEMENT SCM 474 - PURCHASING AND GLOBAL SOURCI LOM 450 – SUSTAINABILITY: ENVIRONMENTAI ECON 311 - PROFESSIONAL ETHICS* 3 Total Credits 15	

Course Credits

LOM 460 - LEGAL CONCEPTS FOR TRANSPORTATION & LOGISTICS MANAGEMENT

LOM 470 - IMPORT & EXPORT MANAGEMENT 3

ELECTIVE CREDITS

LOM 490 - FIELD STUDY AND RESEARCH (CAPSTONE) 3

LOM 491 - INTERNSHIP (CAPSTONE)

Total Credits 15

## ii. Program entrance requirements

Graduate of either the Logistics Management AAS degree or the Operations Systems AAS degree.

If a student who earned an AAS within the system would like to declare this degree, his/her transcripts will be evaluated and completed coursework would be applied as appropriate.

# iii. Program completion requirements (credit hours, grade point average; subject matter distribution, preprogram requirements)

The proposed program consists of 120 credits: 79 lower division credits and 41 upperdivision credits of which, 28 are in general education and 92 in special program requirements.

- iv. Accreditation consideration (organization (if any) which accredits program, requirements for accreditation, plan for attaining accreditation include costs and time frame)  $\rm N/A$
- v. Evidence of approval by appropriate committees of the institution

TMCC Curriculum Assessment and Programs Committee approval - February 13, 2015 TMCC Faculty Senate approval - February 20, 2015

## H. Readiness to begin program

i. Faculty strengths (specializations, teaching, research, and creative accomplishments

The Division of Business is in the process of filling a vacant full-time Logistics Management
tenure track position that has been vacant due to failed search. There is a strong pool of logistics
experts who are available for part-time teaching. In addition, the Finance and Budgeting course
would be taught by current full-time Accounting faculty: one has an MBA and a CPA, the other
has and M.Ed.(Curriculum and Instruction), MBA (Finance) and JD (passed California Bar). The
Business Presentation course would be taught by current full-time Business faculty, all of whom
have MBAs. The Legal Concepts course would be taught by current faculty (Accounting faculty
member and Real Estate faculty member each have JDs). The Production and Logistics
Information Systems course would be taught by Computer Technology faculty, all who hold
Master's Degrees and three who hold Ph.D.s.

ii. Contribution of new program to department's existing programs (both graduate and undergraduate) and contribution to existing programs throughout the college or university

<sup>\*</sup> Exist within NSHE CCN

The proposed program will complete the educational pathway for a career pathway in the Logistics Management and Production Systems education currently provided at TMCC.

- iii. Completed prior planning for the development of the program (recent hires, plans for future hires, securing of space, curricular changes, and reallocation of faculty lines)

  The Division of Business is in the process of filling the tenure track Logisitics Management position that is open due to a failed search. We have been working closely with our Logistics Advisory Board to expand the depth and breadth of the Logistics part-time pool and now have a strong part-time pool. The AAS Logistics Management and AAS Production Systems curriculum have been revised to ensure seamless transition to the BAS. Upperdivision courses will need to be developed as well as the lower division Business Operations Applied Statistics course. Existing space will be utilized.
- iv. Recommendations from prior program review and/or accreditation review teams

  This program proposal was not the result of a program review; it was initiated by the logistics industry in Northern Nevada and their request for a four-year degree option for their existing workforce and to meet the projected workforce needs of their industry.
- v. Organizational arrangements that must be made within the institution to accommodate the program

The proposed program will be housed within the Division of Business. No organizational arrangements need be made.

### I. Resource Analysis

i. Proposed source of funds (enrollment-generated state funds, reallocation of existing funds, grants, other state funds)

The full-time tenure track position is an existing postion and funds for part-time faculty will be enrollment-generated state funds. Library resources, including two new databases and 40 new logistics hard copy printed booksand supplies/operating expenses will be funded equally by state funds and industry philantropic giving. Administrative support will be provided by existing administrative positions in the Dean of the Division of Business' office.

- ii. Each new program approved must be reviewed for adequate full-time equivalent (FTE) to support the program in the fifth year. Indicate if enrollments represent 1) students formally admitted to the program, 2) declared majors in the program, or 3) course enrollments in the program.
  - a. (1) Full-time equivalent (FTE) enrollment in the Fall semester of the first, third, and fifth year.

1st Fall semester 8

**3rd Fall semester** 12

**5th Fall semester** 16

(2) Explain the methodology/assumptions used in determining projected FTE figures. The FTE in the first three years would be fairly low as time must be allotted to enable students to successfully complete either of the feeder AAS degrees. The first two to three years would see mostly current AAS students who are ready to graduate and past graduates enter the program. As the pipeline begins to build momentum, by year five, we

should see numbers begin to increase as the number of graduates from the two AAS feeder programs move on to the BAS degree. Taken into consideration is also the time required to inform and educate the public and build awareness amoung students and employers to the existence of the program as well as have the local economy begin to realize the projected job growth in this sector.

b. (1) Unduplicated headcount in the Fall semester of the first, third, and fifth year.

1st Fall semester 10

3rd Fall semester 15

**5th Fall semester** 20

(2) Explain the methodology/assumptions used in determining projected headcount figures.

An assumption is made that on average, each student will take approximately 12 credits per semester.

iii. Budget Projections – Complete and attach the Five-Year Budget Projection Table. See Attached Budget

### J. Facilities and equipment required

- i. Existing facilities: type of space required, number of assignable square feet, space utilization assumptions, special requirements, modifications, effect on present programs. The existing classroom space is appropriate and classes can be scheduled to complement the existing schedule, thus resulting in more complete use of available space. No modifications or special requirements are required.
- ii. Additional facilities required: number of assignable square feet, description of space required, special requirements, time sequence assumed for securing required space Existing space will suffice; no additional space required.
- iii. Existing and additional equipment required

No additional equipment is required.

K. Student services required – Plans to provide student services, including advisement, to accommodate the program, including its implications for services to the rest of the student body

Key personnel in Admissions and Records, Retention, Tutoring, and Advising were contacted regarding the potential impact on their areas if the proposed program was approved. Based on projected enrollment in the BAS, none of these areas anticipated a need for additional resources.

- L. Consultant Reports If a consultant was hired to assist in the development of the program, please complete subsections A through C. A copy of the consultant's final report must be on record at the requesting institution.
  - i. Names, qualifications and affiliations of consultant(s) used Please see attached for Consultant's full report and bio.

### ii. Consultant's summary comments and recommendations

"The short and long-term prospects for qualified Operations Management professionals is bright. The demand from employers exists now and will boom during the next four years. The number of students will continue to increase as the program is promoted by TMCC and word-of-mouth spreads the message.

Operations management is one of the fastest growing careers in business. My considered opinion is to not approve the proposed TMCC BAS in Logistics Operations Management would be a disservice to the students and current and future needs of the local business community."

Please see attached for Consultant's full report and bio.

## iii. Summary of proposer's response to consultants

We appreciate the effort the consultant put into this endeavor. Thorough research and application of his extensive knowledge of the educational and professional requirements in this area has resulted in a concise and useful report.

## M. Articulation Agreements

# i. Articulation agreements were successfully completed with the following NSHE institutions. (Attach copies of agreements)

None, as no other institution in NSHE offers degrees in this area.

# ii. Articulation agreements have not yet been established with the following NSHE institutions. (Indicate status)

None, as no other institution in NSHE offers degrees in this area.

## iii. Articulation agreements are not applicable for the following institutions. (Indicate reasons)

UNLV - offers courses in Supply Chain Management but no active degree options

UNR - offers courses in Supply Chain Management but no active degree options

GBC - no active Logistics or Supply Chain Management program

WNC - no active Logistics or Supply Chain Management program

NSC - offers a course in Supply Chain Management but no degree options

CSN - no active Logistics or Supply Chain Management program

## N. Summary Statement

This Proposed Applied Logistics Operations BAS resulted from demonstrated local, state and national need for a four-year logistics degree, GOED focus on logistics as a target sector, industry requests, and the lack of a four-year option in the state. It has strong institutional support and enthusisatic Advisory Board recommendation.

Institution: TMCC Program: BAS - Logistics Operations Management Semester of Implementation: Fall 2016	Institution: TMCC	Program:	BAS - Logistics Operations Management Semester of Implementation:	Fall 2016
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<u>DIRECTIONS</u>: Complete the following cost estimates for the first, third, and fifth year budget projections for the proposed new program in Section A. If the total budget for the program is not reflected in the "Existing" or "New" categories, please provide further explanation in the space provided below (EXPLANATION). Any "new" costs must be noted by source in Section B.

STUDENT FTE	Year 1:_	8	Year 3:	12	Year 5:	16						
Section A.		Year 1/Start	t-up			Year 3				Year 5		
	Existing <sup>1</sup>	New <sup>2</sup>	Total	FTE	Existing <sup>1</sup>	New <sup>2</sup>	Total	FTE	Existing <sup>1</sup>	New <sup>2</sup>	Total	FTE
PERSONNEL						•						
Faculty (salaries/benefits) <sup>3</sup>	65,000	0	65,000	1.0	70,850	0	70,850	1.0	77,227	0	77,227	1.0
Graduate Assistants	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0
Support Staff	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0
Fellowships/Scholarships	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0
Personnel Total	\$65,000	\$0	\$65,000	1.0	\$70,850	\$0	\$70,850	1.0	\$77,227	\$0	\$77,227	1.0
OTHER RESOURCES												
Library Materials (printed)	0	1,450	1,450		0	0	0		0	1,000	1,000	
Library Materials (electronic)	0	5,000	5,000		5,000	0	5,000		5,000	0	5,000	
Supplies/Operating Expenses	0	1,000	1,000		1,000	1,100	2,100		1,100	1,210	2,310	
Equipment	0	0	0		0	0	0		0	0	0	
Other Expenses	0	1,000	1,000		1,000	100	1,100		1,100	110	1,210	
Other Resources Total	\$0	\$8,450	\$8,450		\$7,000	\$1,200	\$8,200		\$7,200	\$2,320	\$9,520	
PHYSICAL FACILITIES												
Construction	0	0	0		0	0	0		0	0	0	
Major Renovation	0	0	0		0	0	0		0	0	0	
Other Facility-Related Expenses	0	0	0		0	0	0		0	0	0	
Physical Facilities Total	\$0	\$0	\$0		\$0	\$0	\$0		\$0	\$0	\$0	
TOTAL	\$65,000	\$8,450	\$73,450		\$77,850	\$1,200	\$79,050		\$84,427	\$2,320	\$86,747	
											_	
Section B.	г	A	0/		Г		0/		Г	A	0/	
EXPLANATION OF "NEW" SOURC	-Ec <sup>2</sup>	Amount	%			Amount	%			Amount	%	
Tuition/Registration Fees	ES	0	0.0%			0	0.0%			0	0.0%	
State Support		0	0.0%			600	50.0%			1,160	50.0%	
Federal Grants/Contracts		0	0.0%			000	0.0%			0	0.0%	
State Grants/Contracts		0	0.0%			0	0.0%			0	0.0%	
Private Grants/Contracts		0	0.0%			0	0.0%			0	0.0%	
Private Gifts		8,450	100.0%			600	50.0%			1,160	50.0%	
Other (please specify)		0	0.0%			0	0.0%			0	0.0%	
TOTAL		\$8,450	100.0%			\$1,200	100.0%			\$2,320	100.0%	

<sup>1</sup>Resources re-allocated from existing programs in Year 1 should be noted in the "Existing" column. In addition, "New" costs from Year 1 that will continue in the third and fifth year should also be noted in the third and fifth year as "Exisitng."

**EXPLANATION** (Please provide any additional information pertinent to the budget projection, including for example, explain for any new funding sources that are not guarnateed receipt by the institutions how the program will make-up for the potential loss in expected new funding.):

We project the funding sources for the New program costs in year 1 would be 100 per cent philantranpic giving from business and private sources associated with the logistics industry. This assumption is made with information from the advosry board members and industry representatives.

<sup>&</sup>lt;sup>2</sup>Any "New" resource utilized to fund a new program must include the source to be provided in the "Explanation of New Sources" section. Total "New" sources for each year must equal the total for each year under "Explanation of New Sources."

<sup>&</sup>lt;sup>3</sup>Budget estimates for faculty salaries and benefits must include estimated merit and COLA increases in Year 3 and Year 5.

FROM: Richard Merritt, CFPIM, CSCP, C.P.M., CSSBB

Merritt & Associates 6483 Barat Court Magalia, CA 95954

TO: Dr. Jane A. Nichols

Vice President of Academic Affairs

Dr. Marie Murgolo-Poore Dean, Division of Business

7000 Dandini Boulevard, Sierra 203-F

Reno, NV 89512

Date: March 31, 2015

**REFERENCE:** Bachelor of Applied Science with a major in Logistics Operations Management

**SUBJECT**: Independent findings regarding the viability of the above proposed degree program

### **ASSIGNMENT**:

In accordance with the Nevada State Higher Education (NSHE) <u>Master Plan for Higher Educations</u> in Nevada, Chapter 6, § 10, Paragraph 6, "Need And Demand", Sub-paragraph 4 that states:

"Append a feasibility evaluation of the program proposal, to include its relationship to current student and employer demand. This evaluation should be done by someone from outside the institution who is a member of the field being proposed."

The assignment as proposed and accepted was to investigate the viability of current and long-term demand for the program by employers and students. As an independent evaluator, I met with several industry executives and interviewed staff at a local government agency. I also met with students to glean their perspectives and needs allowing me to gain a 360° understanding of the situation.

This report is the net result of my investigation. This report was not developed or prepared with any other source or influence other than by the interviewees.

### **DATA GATHERING METHODOLOGY:**

All information was received by means of personal and telephonic interviews with all parties. I created a questionnaire for use with the business executives focused on current and strategic hiring plans, job descriptions, requirements for degreed or non-degreed individuals and internships.

The student questionnaire was directed more to the career plans, educational experiences, current employment and future application of the desired majors. I also inquired why the students were interested in operations management.

### **EXECUTIVES' INTERVIEWS:**

Executives from a broad spectrum of industries were personally interviewed over several days. The industries included gaming and hospitality, manufacturing, distribution, Third Party Logistics (3PL), retail internet sales and healthcare services. I also met with the TMCC Advisory Board to ensure their expectations were met. All the executives were President through Director level individuals. Some companies were local enterprises and others had multiple locations in the US and globally. The business ranged from \$50 M to "several" billion in sales.

All of the companies had a local logistics function and a materials planning group, whether centralized or decentralized. Most had local procurement group teams either centralized or decentralized. And two companies had centralized procurement in another state. All had a warehousing function and most had some level of automation in that function. Only one had a warehouse management system (WMS).

All of the executives supported the idea of having a BAS degree offering in the Reno area. Most executives plan to offer internships for local students. The majority of those managers are looking to convert these internships to direct hire as regular full time positions. A large number see their operations management teams needing expansion in approximately the next 1-2 years. Several managers had previously hired interns from the UNR program and were seriously disappointed that the elimination of the program by the university left a major void. This was expressed on more than one occasion.

The interviewees all confirmed that they had formal job descriptions for their professional and managerial positions. Generally professional functions had preferred four year degree requirements while the entry level management specifications all required four year degrees. One organization allowed experience to be considered when a strong candidate didn't have a bachelor's degree. It was also clarified that this was functionally dependent. Everyone confirmed that their hiring practices, whether formal or informal, would favor a candidate with a four year degree.

With the exception of one, all companies that were visited had some tuition and expense reimbursement program as a corporate policy with the caveat that the educational assistance was job related. That single company which did not have a reimbursement policy had no plans for adding this employee benefit in the future. One Vice President wanted to see more BAS

degrees offered and will approach TMCC with their suggestions. Another manufacturing executive wanted weekend offerings and several suggested on-site classes.

### **STUDENTS**:

I met with some students to learn their needs and expectations regarding the course offerings at TMCC. The focus was on their career goals and how the currently available programs at UNR and TMCC supported their individual needs. The findings were illuminating.

These students were employed in the operations management functions. They can earn their associate's degree and if they want a baccalaureate in their chosen field, they will have to either take courses on line, leave the Reno/Sparks area to further their education or stay locally and change their major. They are not feeling positive about their options.

One of the students was exposed to the operations management field while serving in the military. He returned to Reno and used his GI Bill to attend college. He wants his degree in this field. He's temporarily employed in inventory control as a contract worker. His one year contract is nearly over. He was being considered for a permanent position, but was not hired since he didn't have his degree. The company hired from outside and he is now training his replacement. He plans to continue his education but is not sure where.

Another student employed in a warehouse function, "fell into the job". He loves the career path and the many various career opportunities and disciplines that are involved. He is going to obtain his four year degree, but is really disappointed about being forced to change his major. He feels he would have more opportunities in his selected field if he would have a degree in that major. This individual was recently passed over for a promotion because he didn't have his degree, yet and his company hired a person with a bachelor's in design.

## **CURRENT AND FUTURE ECONOMIC OUTLOOK:**

According to the data received from the Nevada Department of Employment, Training and Rehabilitation (DETR) shows the January unemployment rate in the Reno-Sparks metro area is 7.4% with 16,400 unemployed people. This is higher than the U.S. rate of 5.7% which is a seasonally adjusted figure. Of interest is the increase in manufacturing jobs from January 2014 to January 2015 of .9% which is bucking the statewide trend. To highlight this, more than 7,000 new employers have been added statewide since 2011 with the greatest increase during the last year. Contacts at the Economic Development Authority of Western Nevada (EDAWN) confirmed that 4% unemployment is considered to be full employment. With the planned new jobs, there may not be an adequate pool of resources for the new job openings that are expected in the near future.

Tesla Motors is currently building their "Gigafactory" in the eastern region of Sparks that's called TRIC. They are expected to bring more than 6,500 jobs when fully operational by 2018. There are an anticipated additional 10,600 secondary jobs that will be created as a result of the Tesla opening during this same period. EDAWN projects another 34,000 other new jobs as business increases and other companies move into the region. The high tech companies will hire people with high levels of education and training for their professional and management positions. This includes their operations management teams in all areas.

Tesla's suppliers will also be relocating or expanding in the Reno-Sparks just to ensure their relationship is solidified and to be "close to their customer". They will be following suit in the hiring practices and mirror their customer's actions. This is the norm in high technology industries. There will be a tidal wave of demand for all professional disciplines with skills and education. Their wages will be higher as a result.

If qualified individuals are not immediately available when the need is identified, these companies will import the talent rather than hire local residents. On-the-job training will be available, but only for those who meet the minimum requirements. There will be no time for job development training. EDAWN is "greatly concerned about the workforce development". They are feeling the demand pressures and might be falling behind the proverbial eight-ball.

The Governor's office also just announced that Switch has selected Reno and will also be building a huge factory in the TRIC area. This will drive more than 400 new jobs to Reno-Sparks.

EDAWN has seen a 300% increase in monthly corporate visits to the Reno-Sparks area since 2011 to evaluate relocation options. They have also helped create 3,160 and 4,179 new jobs in 2013 and 2014 respectively. It has been confirmed there are 34 companies that are targeting the metropolitan area from Nevada, nine other states and two other countries. These include 13 U.S. headquarters being created. And, of these companies, 62% are manufacturing, 21% distribution and 17% are service based. This has the potential to cause a dynamic and unprecedented job growth situation in the "Biggest Little City in the World".

#### SUMMARY AND RECOMMENDATION

The short and long-term prospects for qualified Operations Management professionals are bright. The demand from employers exists now and will boom during the next four years. The number of students will continue to increase as the program is promoted by TMCC and word-of-mouth spreads the message.

Operations management is one of the fastest growing careers in business. My considered opinion is to not approve the proposed TMCC BAS in Logistics Operations Management would be a disservice to the students and current and future needs of the local business community.

## Richard C. Merritt, CFPIM, CSCP, C.P.M., CSSBB

Cell (530) 353-0296 Home merritt-rc@sbcglobal.net

### **Summary**

Extensive experience in all areas of operations and supply chain management in large and medium high technology companies. Self motivated, high impact, change agent who consistently delivers significant results. Demonstrated flexibility in rapidly changing environments with a global vision, strong leadership, communication and problem solving skills and demonstrated success in:

Strategic planning Materials Management Team Development Lean / JIT / Demand Flow Supply Chain Management Change Management Inventory and Cost Reduction Contracts and Negotiations Financial Planning
Total Quality Management
Outsourcing
New Product Introduction

#### **Experience**

# 2000 – 2013 Applied Materials, Inc. Santa Clara , CA Senior Supply Chain Manager

- Implemented a Supplier Consigned Inventory process that has reduced inventory by \$50 M with an average annual on time delivery from 60 suppliers of 97.44%
- Developed the Recovery of Warranty program that captured \$29 M return for supplier defects
- Negotiated and managed repair and refurbishment agreements supporting the Green Initiatives

## Purchasing Manager - Spares Manufacturing Group

- Successfully drove reimplementation of cycle counting to nearly 98% accuracy in two years
- Achieved annual inventory turns of 10.2 and 9.4
- Created a physical inventory process for consigned inventory that improved accuracy by 80%

## 1998 – 2000 JDS Uniphase San Jose, CA Materials Manager

- Managed multi-site purchasing, production & inventory control and logistics functions
- Drove outsourcing activities for NPI reducing material costs by 48% and lead time to 3 days
- Eliminated in-transit damage of argon lasers through improved packaging

## 1997 – 1998 Hexcel Corporation Pleasanton, CA Sub-contracts Manager

- Forecasted all raw material requirements and negotiated strategic contracts to ensure uninterrupted supply thus minimizing the impact of allocated product
- Reduced raw material cost on an average of 5%
- Exceeded cost savings by 31% during the first 6 months of activity

1995–1997 Phase Metrics, Inc. Fremont, CA

### **Materials Manager**

- Reduced System Material Cost by 12% through strategic contracting including line side stocking
- Outsourced major assemblies eliminating 2700 parts from the B.O.M. and lowering inventory by \$3.7M and sold excess inventory to the contract manufacturer
- Decreased lead times for system build from 16 to 7 weeks
- Secured the stockroom and eliminated shrinkage resulting in annual savings exceeding \$150K

# 1981 – 1995 Applied Materials, Inc. Austin, TX and Santa Clara, CA Commodity Business Group Manager

- Developed and integrated a planning process and project management for contracting efforts.
   Reduced time to closure by 60% and met commitments 100%
- Created and implemented a new floor stock program for more than 3,000 parts, eliminating more than 1,150 weekly shortages
- Strategized contract activities resulting in reductions of more than \$40M of material cost and nearly 60% spot buy transactions. Expanded contract benefits globally
- Managed a team of 27 members negotiating contracts for three commodity groups involving OEM, fabricated and distributed parts

### Purchasing Manager - Capital & Indirect Materials

- Developed a wafer recycling process through which used wafers could be utilized up to four times. Drove negotiations to reduce cost of new wafers. Established a team to standardize specifications and managed the inventories allowing maximum asset utilization. Saved \$2.1M in the first year of operation
- Lead contracting efforts for travel services reducing expenditures by nearly \$3M, provided
- revenue sharing of \$250IK and reduced ticketing error rate to 76 PPM
- Formed and lead a team that created 27 process improvements in 24 months. Received the President's Small Team Quality Award

## Saint Mary's College of California

Moraga, CA

#### **Education**

M.S., Business Procurement and Contract Management

San Jose State University

San Jose, CA

■ B.A., Public Relations with a minor in Business Administration

## Professional Associations & Development

### **APICS - Santa Clara Valley Chapter**

- Certified Fellow in Production and Inventory Management (CFPIM) Lifetime
- Certified Supply Chain Professional (CSCP) Lifetime
- Certified Black Belt in Six Sigma (CBBSS)
- Certified Master Instructor in CPIM and CSCP courses
- Past President
- Past Executive V.P., V.P. of Membership and V.P. of Education

### Institute of Supply Management (ISM formerly NAPM)

- Certified Purchasing Manager Lifetime
- Accredited Purchasing Professional Lifetime

### **American Purchasing Society**

Certified Purchasing Executive – Lifetime