I. Introduction

The Long-range Academic Master Plan (LAMP) Task Force was established by the Provost, in consultation with the Academic Senate, for the purpose of examining CSUSM’s long-range academic master plan, and guide CSUSM’s curricular and program development into the near future (the next three to five years), as well as over the longer term. The Task Force (see Appendix A for membership) received the following charge from the Provost on October 31, 2014:

2014/15 Charge from the Provost (see Appendix B for flowchart):

The Task Force was directed to use information from the University Academic Master Plan, the Colleges’ strategic planning processes, unit three-year rolling plans, and regional economic and employment data, to examine and make recommendations about the prioritization of future degree programs, options, minors, and certificates, from across all of CSUSM’s colleges.

Recommendations in the Task Force report are intended to be independent of resource implications. Although CSUSM’s Budget and Long Range Planning Committee (BLP) and the University Curriculum Committee (UCC) might recommend the adoption of proposals for programs not considered by the Task Force, recommendations must be taken into account by BLP and UCC in the evaluation of new proposals.

In considering program proposals and making its recommendations, the Task Force was directed to take into account, among other things, the following considerations:

- CSUSM’s mission, vision and values
- The University Academic Master Plan
- Three year-rolling plans and College strategic plans
- State and regional needs (including but not limited to economic trends)
- Likely student demand
- Collaborations among CSUSM’s colleges
- Potential collaborations with community partners and other campuses

II. Charge Interpretation

The 2014-15 taskforce focused on available data pertaining to state and regional needs and economic trends as a way to inform colleges and units regarding the new programs they might want to consider proposing as well as existing programs they may want to modify, update, and/or enhance. Colleges and units may also consider the Task Force findings when adding to and modifying 3-year rolling plans as well as considering which of their new programs from the University Academic Master Plan (UAMP) should be prioritized. Some of the regional needs identified were already addressed by existing programs, or by programs that are already being proposed at CSUSM, and minor modifications may better align campus programs with regional workforce needs.
The Task Force did not interpret the directive “make recommendations about the prioritization of future degree programs, options, minors, and certificates, from across all of CSUSM’s colleges” to mean that a prioritization including ALL degree programs appearing on the University Academic Master Plan (UAMP) or on College 3-year rolling plans is expected. The Task Force did not consider programs or majors already initiated programmatically on campus via a p-form. The Task Force report is intended to identify and prioritize those areas of employment or academic study that represents:

- Relevance to the local region
- Demand from students and community partners
- Consistency with CSUSM’s mission and values
- Need for foundational programs

The Task Force report identifies, in rank order, areas with high anticipated demand for skilled employees based on our analysis of workforce reports and economic trends in the region, along with examples of majors that would qualify students for jobs in these areas. The prioritization encompasses areas of industry sectors or academic study first, followed by illustrative examples of possible programs within each area, where appropriate. These programs can be majors, minors, options or certificates.

In addition to consideration of regional demand, we identified core (aka foundational) undergraduate programs that each CSU campus is encouraged by the CSU Trustees to develop that do not yet exist at CSUSM. Because the CSU wants these programs to be implemented. Regardless of regional demand or student interest, the Task Force did not prioritize them along with programs that were identified based on workforce demand, but instead we noted which of these programs are not yet on our campus.

It is important to note that future program proposals linked to employment areas on the prioritized list should not necessarily be considered or implemented before programs that do not appear on the list. Rather, it is the intention of the Task Force to communicate that Colleges are encouraged to use the list to guide development of programs that are either foundational or best align with regional needs. Given this interpretation of the “charge” relegated to the Task Force, it would be more appropriate to refer to the deliberations and rankings in this report as a Long-range Academic Prioritization, rather than a Long-range Academic Master Plan.

III. Process

The Task Force recommends that the long-range academic prioritization be revisited every 3 years. In years when the Task Force is not scheduled to revisit long-range academic prioritization, we suggest that the Provost, Vice Provost, Senate Chair, and BLP Chair meet to determine whether or not there are other issues that warrant convening the Task Force.

The Task Force met 11 times during the Academic year 2014-15. Minutes and agendas can be found on the website at: [http://www.csusm.edu/LAMP/Minutes%20and%20Agendas/index.html](http://www.csusm.edu/LAMP/Minutes%20and%20Agendas/index.html). During this time, the Task Force reviewed best available data, from a variety of resources that was often reported in terms of projections or gathered from employer surveys. Proposers of new programs are encouraged to use these data sources to justify their programs, or other data sources as appropriate. For example, data on student demand was more difficult to obtain than data on workforce needs, but should be an important part of new program development.
The following resources, consisting of documents, guest speakers, conferences, and references, were considered by the Task Force in its deliberations:

- San Diego Workforce Conference (10/2/2014) (Appendix C)
- San Diego Workforce Partnership (www.workforce.org/industry-reports)
- 31st Annual San Diego County Economic Roundtable (1/16/2015) (Appendix D)
- North San Diego County Economic Summit (http://sdnec.org/)
- Christina Vincent (Chief Economist, SANDAG): Visit on 2/18/2015 (Appendix E)
- Related Articles:
  - 2010-2020 San Diego County Projection Highlights (Appendix F)
  - 2010-2020 Industry Employment Projections SD-Carlsbad-San Marcos Area (Appendix G)
  - Task Force Aim: Job Ready Students (Appendix H)
  - Idea Jam Explores Future Jobs of San Diego (Appendix I)
  - Diverse Issues in Education: Job-Readiness of College Graduates (Appendix J)
  - Speak Up STEM (Appendix K)
- H1B Visa data (http://www.uscis.gov/sites/default/files/USCIS/Resources/Reports%20and%20Studies/H-1B/h1b-fy-12-characteristics.pdf)
- University Academic Master Plan (CSUSM)
  - http://www.csusm.edu/academic_programs/catalogcurricula/masterplan.html
- Basic (Core) Undergraduate Programs as reported in CSU’s Program Planning Resource Guide: Academic Programs and Faculty Development, Fall 2014 http://www.calstate.edu/app/policies/program-plan-resource-guide.pdf
- Programs at neighboring institutions (including 2-year colleges)
  - SDSU (Appendix L)
  - UCSD (Appendix M)

IV. Prioritized List

This prioritization encompasses industry sectors or areas of academic study first, with illustrative examples of possible programs within each area. These programs can be majors, minors, options or certificates. The examples of programs/majors are listed in alphabetical order and are not exhaustive or representative of Task Force preferences. The number in parentheses reflects the rank in the prioritization. The top three industry sectors/areas of academic study were ranked equally.

- **(1) Biomedical/Biotech**
  - Bioengineering
  - Bioinformatics
  - Biomedical Engineering
  - Medical Laboratory Technology
  - Regulatory Affairs

- **(1) Computer/Software Engineering**
  - Computer Engineering
  - Hardware Engineering
• (1) Environmental
  o Clean Tech Construction Management
  o Environmental Policy and Analysis
  o Environmental Science
  o Green MBA
  o Renewable Energy, Sustainability (add emphasis to Business degree)
  o Solar Energy Systems Engineering

• (4) Healthcare
  o Health Informatics
  o Healthcare Social Work
  o Medical/Clinical Laboratory Technology
  o Physician’s Assistant Program

• (5) Engineering – Other
  o Aerospace Engineering
  o Agricultural Engineering (including brewing)
  o Chemical Engineering
  o Civil Engineering
  o Construction Engineering Electrical Engineering
  o Engineering Management
  o Environmental Engineering
  o Industrial Engineering
  o Mechanical Engineering
  o Urban Studies – Urban Planning, Design and Management

• (6) Action Sports
  o Action Sports Engineering
  o Recreation and Tourism management (Recreation Systems Management)
  o Sports Marketing and Management

• (7) Computer Related Certifications, in areas such as
  o Advanced Geospatial Analysis (Geographic Information Systems)
  o Database Management Systems
  o Information Assurance and Security
  o Information Systems Management
  o Networking Technologies
  o Software Application Development

• (8) Technical Writing
  o Data Visualization
  o Scientific Illustration
  o Technical Writing as an option or emphasis in majors such as:
    ♦ Writing
    ♦ Journalism
V. Foundational Undergraduate Programs

Several core undergraduate programs identified by the CSU Trustees as basic components of a University curriculum are not yet implemented at CSUSM. “In developing the original planning policies for the CSU, the Board of Trustees recognized that certain academic programs at the undergraduate level were so fundamental to the University they should not be required to meet the ‘need and demand’ criteria established as prerequisites for offering other programs” (CSU’s Program Planning Resource Guide: Academic Programs and Faculty Development, Fall 2014, p. 116) (Appendix O). The original (1963) list of basic (core) undergraduate programs was updated in 1980 and remains as the current list of programs that that should be evaluated using “qualitative criteria regarding program integrity” as preeminent to need and demand. Although rankings in the previous section were based on regional and workforce needs, four undergraduate programs from the basic program’s list are not currently offered at CSUSM. To that end, the taskforce recommends that Colleges also consider implementing the following majors (unranked, listed in alphabetical order):

- Geography
- Geology
- Philosophy
- Theatre Arts/Drama

VI. Additional Recommendation

“Soft skills” was a repeated topic in LAMP discussions. Task Force members attended numerous off campus meetings where the importance of skills such as interpersonal communication, writing, problem-solving, and organization were discussed. Employers who work with the Career Center indicate that CSUSM graduates are getting excellent academic preparation, but may lack the soft skills needed to be competitive in the job search process. While this is not a specific degree program recommendation, the Task Force determined that it warrants further campus discussion. For example, a cross-college conversation could be initiated to investigate integrating soft skills into academic curricula.

VII. Appendices

A. Task Force Membership
B. LAMP Flowchart
C. San Diego Workforce Conference contains the Subject matter discussed
D. San Diego Economic Roundtable Consists of six (6) reports from Economic Influences in San Diego
E. Carlsbad Specific Reports
F. 2010-2020 San Diego County Projections (Article)
G. 2010-2020 Industry Employment Projections specific to North County as well as San Diego (article)
H. Task Force Aim: Job Ready Students (Article)
I. Idea Jam: Explores Future Jobs of San Diego (Article)
J. Diverse Issues in Education: Job Readiness of College Grads (Article)
K. Speak up STEM (Article)
L. SDSU Majors offered
M. UCSD Majors offered
N. CSUSM Majors offered