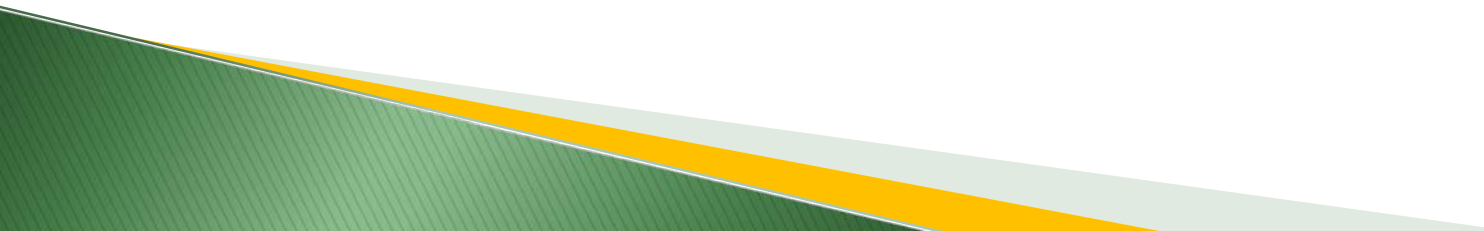# Strategic Resource Allocation - Data

Jason Nicholas

Director of Institutional Research and Analysis

Data Highlights

- Support Programs = 250
- Academic Programs = 355
  - Definition of "program" forces data to be assembled using course records
  - <u>Courses dataset</u> contains 3,300,000 data points across 3 semesters
  - <u>SRA programs dataset</u> contains 13,000+ newly created data points
    - Many supporting data points for comparative purposes
- Templates are created and sent along with data to Qualtrics (survey vendor)
  - Data inserted into template
  - Ensures quality and efficiency
  - Data and reports can be easily downloaded for use in the review process

Types of Data – Financial

Support Program Data	Academic Program Data
• FTE • Allocated Revenues • Allocated Expenses • Direct Revenues – External • Direct Revenues – Internal • Direct Expenses – Labor • Direct Expenses – Other • Totals	• SCH • FTE • State Appropriations • Net Tuition and Fees • General University Revenue • Student TLC Costs • Utilities • Debt Svc/Interest Exp • Depreciation • Other Overhead • Tuition and Fees • Grants & Contracts • Sales & Services • Gifts • Labor Supplies, Services & Equipment • Total

Types of Data – Academic

Support Program Data	Academic Program Data
	• SCH
	• Seats in Courses
	• Average ACT
	• Average SAT
	• Average HS GPA
	• Average Transfer GPA
	• Enrollment Counts (SU15, FA15, WI16)
	• Degrees Awarded
	• Average Degree Hours at Grad
	• Exported Hours
	• SCH by Faculty Type
	• % of Dept. SCH by Faculty Type
	• Associated Pivot Tables
	• Program Average and Max

Data Assembly Videos

- Vid 1

Data Assembly Videos

- Vid 2

Qualtrics Example

Criterion 5

Cost Effectiveness – This criterion focuses on the expenses (including assigned overhead) incurred by the program in providing its services and conducting its activities. (For programs that have revenue-generating capability, costs are considered net of revenues.) 15 pts. (1500 characters)

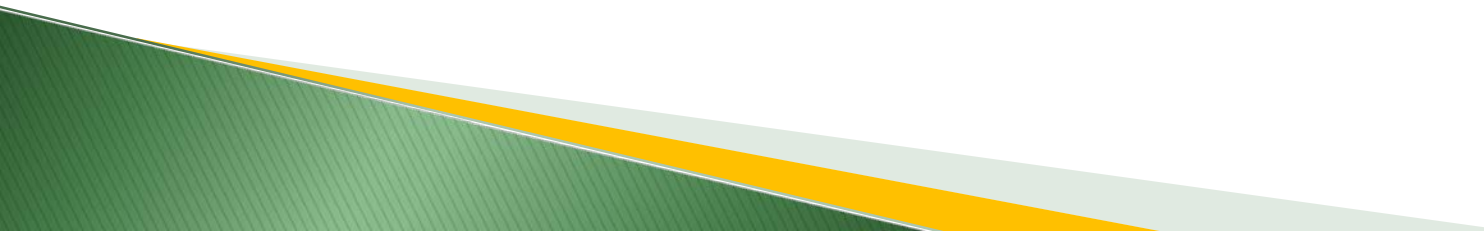| Program	
FTE	7.29
Allocated Revenues	$(242,501.92)
Allocated Expenses	$117,814.60
Direct Revenues-External	$(6,117.97)
Direct Revenues-Internal	$
Direct Expenses-Labor	$424,728.88
Direct Expenses-Other	$43,795.90
TOTAL	$337,719.49

a. Comment on the annual cost of the program and/or its annual income generated.
b. Comment on the staffing of your program (FT or PT including titles, GA, students – student hours).
c. Describe efforts to analyze and reduce cost, increase revenue, and/or operate more cost effectively over the past three years.

<<

Save answer and continue

Contact Information

Criteria 1 - Impact, Justification, and Overall Essentiality

Criteria 2 - Quality

Criteria 3 - Internal Demand

Criteria 4 - External Demand and Mandates

Criteria 5 - Cost Effectiveness

Criteria 6 - Opportunity Analysis

Approval

Transparency

- Key to the process are open and available methods
  - Complex process
  - Ensure University buy-in and confidence in the process
    - Animations
    - Logic Document (reviewed and supported by Academic TF faculty)
    - University Forums

- Feedback from Larry on NMU methods:

  "...these videos (and the accompanying document) are very impressive. To the best of my knowledge, no other university has created videos to explain the development of programs and related data. Very nicely done."

https://www.nmu.edu/sra/
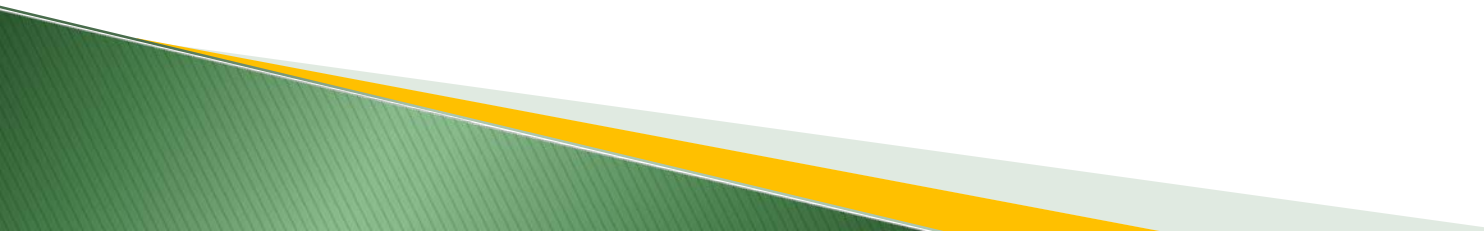
Questions?

Jason Nicholas

Director of Institutional Research and Analysis

x2379 – janichol@nmu.edu

Support Task Force Strategic Resource Allocation

Tricia Bush, Support Task Force Co-chair

Jeff Korpi, Support Task Force Co-chair

Support Task Force

- Looking Back:
  - April
    - Completed questionnaire
  - May
    - Completed and posted appropriate and inappropriately filled out samples
  - June/July
    - Practiced voting process with sample templates
  - August/September
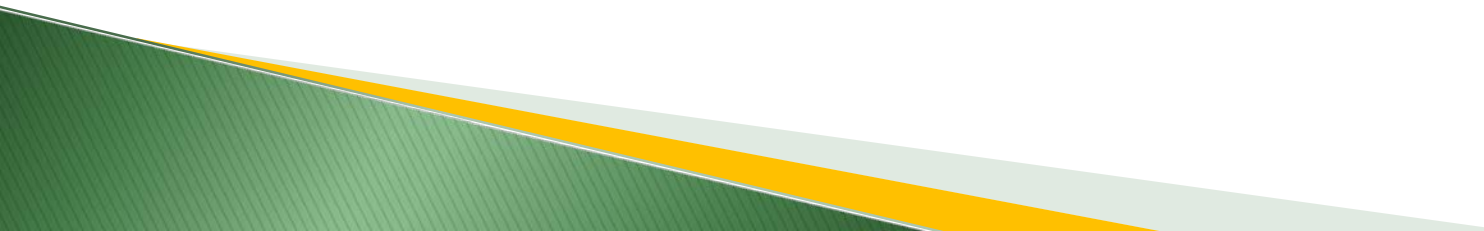   - Qualtrics is building form with data imbedded in Q5

Program Definition

A program is defined as a specific function or subset of a unit or department.

Department	Program
Housing & Residence Life	Apartment Operations
Housing & Residence Life	Building Services Shop
Housing & Residence Life	Hall Operations
Housing & Residence Life	Housing & Residence Life Administration
Housing & Residence Life	Residence Life Programs
Housing & Residence Life	Wilkinson House

Support Task Force – Q1

- Impact, Justification, and Overall Essentiality - This criterion focuses on the overall importance of the program and its contributions to the institution's success. 21 pts. (2500 characters)
  - Summarize and outline the key purpose and functions of your program.
  - How has the program evolved?
  - How does this program support the University and its Core Values (Community, Rigor, Opportunity, Environment, Inclusion, Connections and Innovation)?

Support Task Force – Q2

- Quality – This criterion focuses on the quality of the services and efforts provided by the program. 18 pts. (2000 characters)
  - What measurements and/or benchmarks do you use to track how your program is meeting its goals and providing services?
  - Provide data that demonstrates your program's efforts to meet its goals or benchmarks.
  - Describe significant accomplishments over the past three years.
  - Evaluate the program's resources such as facilities (i.e., office and general space requirements), equipment, technology, and professional development and how they affect the quality of the program.

Support Task Force – Q3

- Internal Demand – This criterion focuses on the utilization of the services and reliance on the function's efforts by internal individuals, departments, and programs within the institution.   19 pts. (2250 characters)
  - Describe the key internal users (admitted students, staff, faculty, and depts.) of your program.
  - Describe current internal demands and/or institutional policies that affect this program.
  - Quantify and describe the changes in internal demand over the last three years.
  - Describe any approved projects or initiatives that will affect internal demand in the next three years.
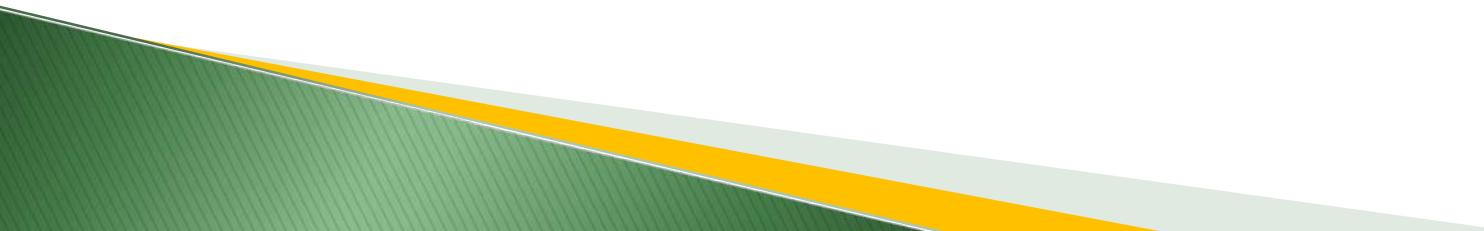
Support Task Force – Q4

- External Demand and Mandates – This criterion focuses on factors related to the level of external (e.g., prospective students, alumni, retirees, community members) interest in the services provided by the program, as well as the external mandates (e.g., OSHA and/or other required state or federal mandates) influencing the program's efforts. 16 pts. (2250 characters)
  - Describe the key external audience or constituencies such as prospective students, community members, alumni, retirees, etc. of your program.
  - Quantify and describe the external demand of the program.
  - Quantify and describe the changes in external demand over the last three years.
  - Describe current or proposed mandates (e.g., OSHA and/or other required state or federal mandates) that affect external demand and/or how services are delivered for this program.

Support Task Force – Q5

- Cost Effectiveness – This criterion focuses on the expenses (including assigned overhead) incurred by the program in providing its services and conducting its activities. (For programs that have revenue-generating capability, costs are considered net of revenues.) 15 pts. (1500 characters)

DEPARTMENT DATA WILL BE PROVIDED

- Comment on the annual cost of the program and/or its annual income generated.
- Comment on the staffing of your program (FT or PT including titles, GA, students – student hours).
- Describe efforts to analyze and reduce cost, increase revenue, and/or operate more cost effectively over the past three years.
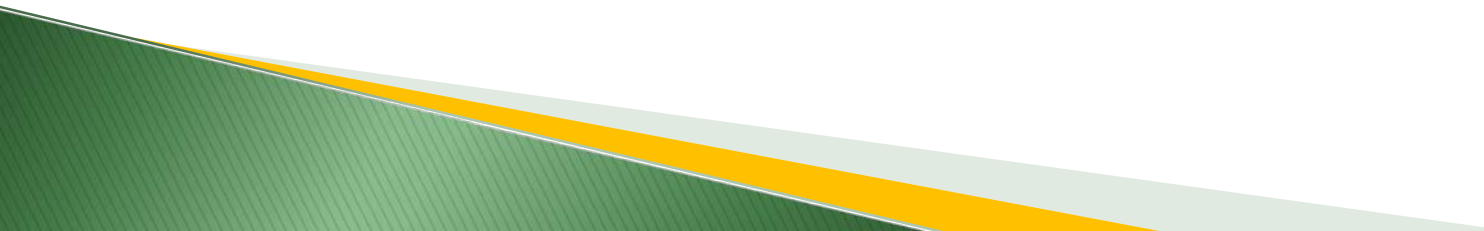
Department Data
Example: Wildcat Water Park

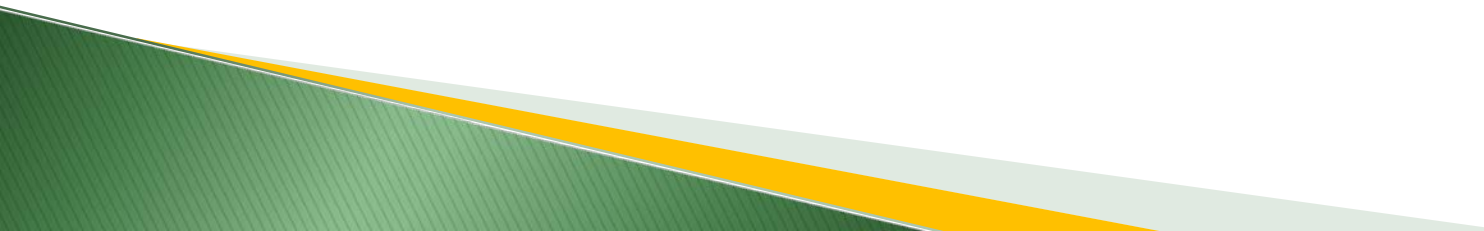| FTE	7.7
Allocated Revenues	$(242,105.92)
Allocated Expenses	$103,814.60
Direct Revenues-External	$(3,117.97)
Direct Revenues-Internal	
Direct Expenses-Labor	$420,728.88
Direct Expenses-Other	$243,795.90
TOTAL	$523,115.49

Support Task Force – Q6

- Opportunity Analysis – This criterion allows the program to describe the additional contributions it could make with specified additional resourcing. 11 pts. (1500 characters)
  - Describe opportunities for growth or enhancement in your program with new investment/collaboration/resources that would allow you to deliver services more effectively and efficiently in the short and/or long term. (Please be as specific as possible when describing what is needed to achieve the growth or enhancement.)

Sample Testing

- US Olympic Training Site, USOTS
- Wilkinson House, Housing & Residence Life
- Computing Helpdesk, AIT
- Degree Evaluation, Registrar
- Disability Student Services, Dean of Students Office
- Golf Course Operations, University Center

Quintiles

- Recommend for enhanced resources
- Recommend continuing with existing resources
- Recommend continuing with reduced resources
- Recommend transformation with revised resources as appropriate
- Recommend consideration for phase out by senior leadership

Support Task Force

- Looking Ahead:
  - September
    - Send questionnaire out to departments/programs
  - October
    - Submittal dates staggered based on number of programs
    - Start review process

Academic Task Force Strategic Resource Allocation

Professor Carol Johnson, Co-Chair

Dr. David Wood, Co-Chair

Academic Program Review Process

- Initiated by a series of common questions via a TEMPLATE that will enable a program to "tell" its story
- Snapshot – Summer and Fall 2015 & Winter 2016 semesters
- 360 "programs"
  - Majors, minors, concentrations, and service programs
    - Any entity which produces Student Credit Hours (SCHs)
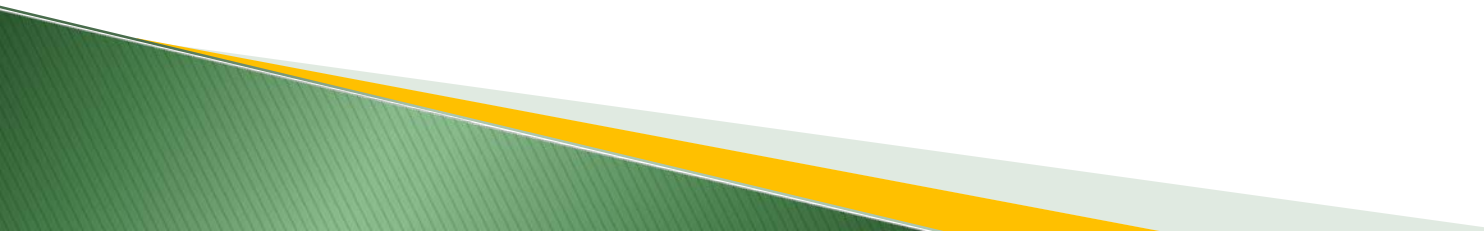 - Departments or colleges are too large

Example of "ACADEMIC PROGRAM LIST : BIOLOGY

Associates Biology General University Studies Human Biology CONCENTRATION	BI	CONCENTRATION
Associates Biology General University Studies Biology CONCENTRATION	BI	CONCENTRATION
Bachelors Biology Botany CONCENTRATION	BI	CONCENTRATION
Bachelors Biology Biology/Ecology CONCENTRATION	BI	CONCENTRATION
Bachelors Biology General Biology CONCENTRATION	BI	CONCENTRATION
Bachelors Biology Biology/Microbiology CONCENTRATION	BI	CONCENTRATION
Bachelors Biology Biology/Physiology CONCENTRATION	BI	CONCENTRATION
Bachelors Biology Zoology CONCENTRATION	BI	CONCENTRATION
Bachelors Biology Biology MAJOR	BI	MAJOR
Bachelors Biology Biology MINOR	BI	MINOR
Bachelors Biology Biology/Secondary Education MAJOR	BI	MAJOR
Bachelors Biology Biology/Secondary Education MINOR	BI	MINOR
Bachelors Biology Fisheries and Wildlife Mgmt MAJOR	BI	MAJOR
Bachelors Biology Human Biology MINOR	BI	MINOR
Bachelors Biology Neuroscience/Cell & Molecular MAJOR	BI	MAJOR
Biology Service Course Program	BI	SERVICE
Masters Biology Biochemistry/Biology MAJOR	BI	MAJOR
Masters Biology Biology MAJOR	BI	MAJOR
Masters Biology Post-Secondary Biology Educatn MAJOR	BI	MAJOR

Academic Program Review Process

- Data driven process
- Academic programs have much more data to consider in the SRA process than Support Program Review
  - ATF has developed 10 criteria
  - Some criteria have several prompts
    - NMU Institutional Research will drop in relevant data for all programs
      - i.e., enrollment
      - # of students, NMU average, NMU Max
      - Comparison of similar programs – AD, BS, and Graduate
  - University's Finance department provides program revenue and cost

- Various total weighting = 100

Academic Program Template

- **CRITERION 1: HISTORY, DEVELOPMENT, & EXPECTATIONS (7 points)**

- *Historical factors related to the program's development. Guiding Questions: What was the original intent of this program? How has the program evolved over the past five years (fall 2011- summer 2016)? How has it adapted to meet change?*

  ◦ Provide a description of the program's history including the evolution of the program over the years.

Academic Program Template

▶ **CRITERION 2: EXTERNAL DEMAND FOR THE PROGRAM (12 points)**

◦ *A number of constituents drives external demand for programs: students and their families, employers and business partners, and other university partners. Address the external demand for the program.*

◦ *Sources*

• Bureau of Labor Statistics - Occupational Outlook Handbook https://www.bls.gov/ooh/home.htm,

◦ The National Association of Colleges, and

• http://www.economicmodeling.com/ software

Academic Program Template

- ## CRITERION 3: INTERNAL DEMAND (12 pts.)
  - Internal demand for programs is driven by how the program serves the university.
    - What is the relationship of the program to other programs or curricula?
    - How does the program serve other programs or institutional needs?
    - The student credit hours generated by students in this program for all other programs at NMU.

- ## CRITERION 4: QUALITY OF INPUTS (12 pts.)
  - This criterion assesses the quality of various inputs (e.g., students and faculty [including Professional Development/Scholarship/Service]) employed by the program in meeting its service objectives.
    - Is accreditation available for your program? Is program accredited?
    - The students admitted into your program.

Academic Program Template
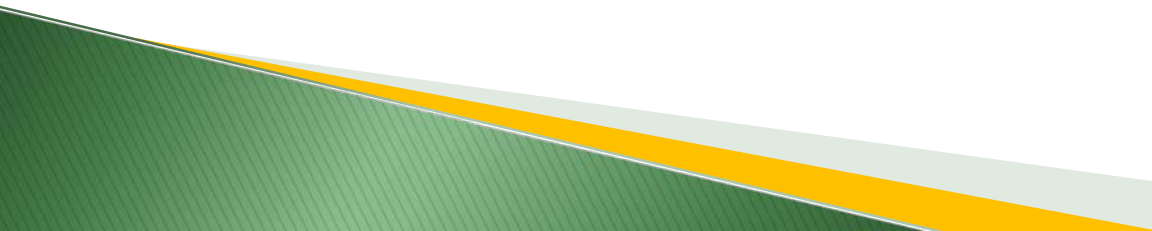
▶ **CRITERION 4: QUALITY OF INPUTS (12 pts.)**

◦ What is the composition of faculty affiliated with the program?

◦ What percentage of the faculty that potentially could teach in this program lack a terminal degree or certification?

◦ Enumerate examples of your faculty members' professional development/scholarship/ service (e.g., presentations & publications)

▶ **CRITERION 5: QUALITY OF OUTPUTS (16 pts.)**

◦ Quality of outcomes is the relative success of the program's accomplishments in terms of outcomes assessment, student learning, and graduation rates.

• What are the results of program assessment of student learning outcome reports?

• Sources: Program Assessment of Learning Reports, National Certification Examinations

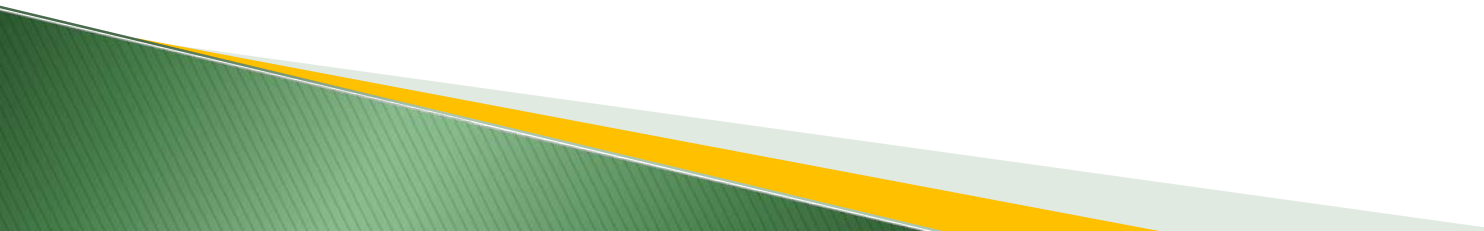• Enumerate examples of program's student scholarship, service, or awards.

Academic Program Template

▸ **CRITERION 6: SIZE, SCOPE & PRODUCTIVITY (10 pts.)**

◦ What is the size of the program in student-credit hour production, students served, the breadth of the curriculum, and relative number of students served based on inputs employed?

◦ What is the number of degrees awarded?

◦ What number of credit hours is required for this program?

◦ How many credit hours are available as elective options within this program?

Academic Program Template

- **CRITERION 7: REVENUE & OTHER RESOURCES GENERATED (6 pts.)**
- Net Tuition.
- Other sources.

- **CRITERION 8: EXPENSES & OTHER COSTS INCURRED (6 pts.)**
- Direct & Indirect Costs.
- Revenue/Cost ratio.
- Narrative explaining a detailed assessment of possible cost savings as a result of program elimination.

Academic Program Template

▸ **CRITERION 9: IMPACT, JUSTIFICATION & OVERALL ESSENTIALITY (10 pts.)**

◦ Narrative explaining <u>WHY</u> program is essential to the mission of the university, community, and/or region.

◦ Enumeration of ways this program helps the university <u>differentiate</u> itself from other colleges and universities in the state, region, and nation.

◦ Detailed description of why data presented in template is not the norm for this program.

Academic Program Template

- **CRITERION 10: OPPORTUNITY ANALYSIS (9 pts.)**
  - This criterion allows the program to describe the additional contributions it could make if it had access to specific additional resources.
    - Narrative regarding what the program has already done to transform itself (i.e. curriculum proposal).

    - What specific resources (e.g., new personnel, new technology, new equipment and facilities) would enable the program to be strengthened or transformed?

    - Listing of potential collaborations (within the university, beyond, etc.) and/or other opportunities for program improvement.

ACADEMIC TASK FORCE : TO-DO

- Create Qualtrics Academic Template
- Develop sample/test program
  - INTERSTELLAR HOSPITALITY
- Provide training for Template completion for Department heads/Directors
- Complete sample program reviews for
  - Secondary Education History Program
  - Clinical Laboratory Technician Associate Degree Program
  - Political Science General (UG) Program
  - Physics Service Program

- Task force development of "review" measurements for individual criteria
- Distribute Qualtrics Survey to Program Directors/Department heads
  - Stagger submissions

SEPTEMBER 2017