



# unit **PIE**

2014-15  
2015-16  
2016-17  
2017-18

## Planning for Institutional Effectiveness

### Introduction

- I. Unit Information
- II. Institutional Mission
- III. Unit Mission
- IV. College Themes and Goals

### Section One

#### Where We Are: A Summary and Analysis of the Current Year 2014-15

- I. Summary Context: Unit Goals
- II. Notable Achievements
- III. Tracking of External/Internal Conditions, Trends, Impacts, Critical Decisions and Progress on Outcomes Assessment
- IV. Alignment and Progress on Unit and College Goals: Closing the Loop

### Section Two

#### Where We Are Going: Planning for the Next Three Years, 2015-16, 2016-17, 2017-18

- I. Planning Context: Unit Goals Assessed and Revised
- II. Annual Implementation Plan
- III. Resources Identified in Relation to Planning

### Section Three

#### Recommendations for Improving the Planning Process

*NOTE: This PIE Form is optimized to be used in Acrobat or [Adobe Reader 10 or later](#).*



# unit PIE

2014-15  
2015-16  
2016-17  
2017-18

## Planning for Institutional Effectiveness

### Introduction

UNIT	Aeronautics and Transportation	Current Year	YEAR 1	YEAR 2	YEAR 3
Contact Person	Linda Rogus/Robert Rogus	2014-15	2015-16	2016-17	2017-18
E-mail / Extension	<a href="mailto:lrogus@mtsac.edu">lrogus@mtsac.edu</a> , x5007/ <a href="mailto:rrogus@mtsac.edu">rrogus@mtsac.edu</a> , x5006	<input checked="" type="checkbox"/> Summary	<input checked="" type="checkbox"/> Planning	<input checked="" type="checkbox"/> Planning	<input checked="" type="checkbox"/> Planning

Your Unit Program Review will be recorded on this form summarizing the current year and documenting planning for the next three-year cycle. **Please remember** that all outcomes assessment work should be recorded in TracDat (<http://tracdat.mtsac.edu/tracdat>) in order for your assessment work to best contribute to institutional reports. Outcomes assessment work may include courses, programs, direct and indirect services, organizational processes, and institutional outcomes. Respond to only the outcomes categories or types that apply to your unit.

### Institutional Planning Framework

The college is unified through its demonstrated connection to the mission. Driven by the California Master Plan for Higher Education, revised by the President's Advisory Council, and approved by the Board of Trustees, it informs all planning and assessment.

#### Institutional Mission

***The mission of Mt. San Antonio College is to support students in achieving their full educational potential in an environment of academic excellence.***

#### Unit Mission

*Enter your Unit mission statement here if applicable*

## College Themes and Goals

College themes and goals allow the campus to focus on critical issues. Articulated by the President's Advisory Council and approved by the Board of Trustees, they guide institutional planning and assessment processes.

### **Theme A: To Advance Academic Excellence and Student Achievement**

- |                 |   |
|-----------------|---|
| College Goal #1 | The college will prepare students for success through the development and support of exemplary programs and services.   |
| College Goal #2 | The college will improve career/vocational training opportunities to help students maintain professional currency and achieve individual goals.   |
| College Goal #3 | The college will utilize student learning outcome and placement assessment data to guide planning, curriculum design, pedagogy, and/or decision-making at the department/unit and institutional levels. |

### **Theme B: To Support Student Access and Success**

- |                 |   |
|-----------------|---|
| College Goal #4 | The college will increase access for students by strengthening recruitment opportunities for full participation in college programs and services. |
| College Goal #5 | Students entering credit programs of study will be ready for college level academic achievement.  |
| College Goal #6 | The college will ensure that curricular, articulation, and counseling efforts are aligned to maximize students' successful university transfer.   |

### **Theme C: To Secure Human, Technological, and Financial Resources to Enhance Learning and Student Achievement**

- |                  |   |
|------------------|---|
| College Goal #7  | The college will secure funding that supports exemplary programs and services.  |
| College Goal #8  | The college will utilize technology to improve operational efficiency and effectiveness and maintain state-of-the-art technology in instructional and support programs.     |
| College Goal #9  | The college will provide opportunities for increased diversity and equity for all across campus.  |
| College Goal #10 | The college will encourage and support participation in professional development to strengthen programs and services.   |
| College Goal #11 | The college will provide facilities and infrastructure that support exemplary programs and the health and safety of the campus community.                                   |
| College Goal #12 | The college will utilize existing resources and improve operational processes to maximize efficiency of existing resources and to maintain necessary services and programs. |

### **Theme D: To Foster an Atmosphere of Cooperation and Collaboration**

- |                  |   |
|------------------|---|
| College Goal #13 | The college will improve the quality of its partnerships with business and industry, the community, and other educational institutions.                     |
| College Goal #14 | The college will improve effectiveness and consistency of dialogue between and among departments, committees, teams, and employee groups across the campus. |

# SectionOne

## Where We Are: A Summary and Analysis of the Current Year 2014-15

### I. Summary Context - Unit Goals for: Aeronautics and Transportation

Identify the goals that guided your Unit's work for the 2014-15 year (from your 2013-14 PIE form) in the following table and connect those goals to the College Themes. *Add rows (+) as needed. Delete rows (X).*

Unit Goal Name	Unit Goal	<u>College Theme</u>
Technology	Staying on the forefront of technology	C: Secure Resources
Access for Students	Support student access to department programs and services	B: Access and Success
Flight Training Facility	Facility improvements that maximize student learning	C: Secure Resources
Support Staff	Increase the effectiveness of department initiatives	C: Secure Resources
Partnerships	Explore partnership opportunities	D: Cooperation/Collaboration

### II. Notable Achievements for: Aeronautics and Transportation

Enter your Unit's successes for the 2014-15 year in the table below. This provides opportunity for closing the loop on your Unit's activities completed this year. *Text boxes will expand as needed. Add rows (+), delete rows (X).*

Priority for Manager Summary	Unit Achievements for the 2014-15 Year	Connected Goal/ Theme
High	Developed and submitted curriculum for new course and certificate program: FAA Aircraft Dispatcher	Access for Students
		A. Academic Excellence
High	The Flying Team was awarded the "Top Two-Year School Trophy" and "Top Instrument Pilot" at the Pacific Coast Intercollegiate Flying Association's "Regional Safety and Flight Evaluation Conference" (PCIFA SAFECON Airmeet).	Technology
		A. Academic Excellence

### III. Tracking of External/Internal Conditions, Trends, Impacts, Critical Decisions and Progress on Outcomes Assessment

The following table is intended to track conditions that influence planning over a multi-year period beginning with the 2014-15 year. Please include data. The "Link to Data Sources and Support Options" button will open a Mt. SAC webpage that offers suggestions and links for possible data sources for your Unit. Text boxes will expand. *Add (+) rows, delete (X) rows as needed.*

Link to Data Sources and Support Options		
Year	<i>Add item</i> External Conditions, Trends, or Impacts	Data Sources
2015-16 New	Positive Job Outlook for FAA Air Traffic Control - FAA hiring will remain strong through year 2024. The FAA Controller Workforce Plan ( 2015-2024) states that the FAA will hire more than 6,300 controllers over the next five years with steady hiring of 700 controllers per year out to year 2024 (page 43).	<a href="https://www.faa.gov/air_traffic/publications/controller_staffing/media/CWP_2015.pdf">https://www.faa.gov/air_traffic/publications/controller_staffing/media/CWP_2015.pdf</a>
2015-16 New	Biographical Questionnaire Validity Questioned: June 2015 - Investigation revealed that FAA employees illegally distributed the FAA Biographical Exam answers to members of an advocacy group. Congress asks for answers and an investigation while FAA stonewalls.	<a href="http://www.wsj.com/articles/affirmative-action-lands-in-the-air-traffic-control-tower-1433283292">http://www.wsj.com/articles/affirmative-action-lands-in-the-air-traffic-control-tower-1433283292</a>
2015-16 New	Faulty FAA Hiring Process: June 2015 - Senate and House of Representatives initiated an investigation into FAA hiring practices to be carried out by the Department of Transportation Inspector General's Office.	<a href="https://www.oig.dot.gov/sites/default/files/FAA%20ATC%20Hiring%20Policies%20and%20Procedures%5E06-17-15.pdf">https://www.oig.dot.gov/sites/default/files/FAA%20ATC%20Hiring%20Policies%20and%20Procedures%5E06-17-15.pdf</a>
2015-16 New	Privatization of Air Traffic Control: FAA privatization movement has unprecedented support from both sides of Congress. The outcome is unknown but if privatization prevails there will be an opportunity for Mt. SAC to partner with the new organization to provide trained air traffic control graduates.	<a href="http://thehill.com/policy/transportation/246623-gop-expected-to-unveil-house-air-traffic-control-privatization-bill">http://thehill.com/policy/transportation/246623-gop-expected-to-unveil-house-air-traffic-control-privatization-bill</a>

2015-16 New	Positive Job Outlook Professional Pilot: Boeing projects a need for 533,000 new pilots by 2033, including 88,000 in North America and 216,000 in Asia... "We are talking about explosive growth," said Capt. Carl Davis, chief pilot for Boeing's pilot services. "How are we going to find pilots to fill these airplanes?" "We can argue these numbers, but it's clear there's a need, a demand...we have a need for pilots in the airline industry."said Ken Byrnes, chairman of the flight department at Embry-Riddle Aeronautical University.	<a href="http://www.boeing.com/commercial/market/long-term-market/pilot-and-technician-outlook/">http://www.boeing.com/commercial/market/long-term-market/pilot-and-technician-outlook/</a>  <a href="http://www.usatoday.com/story/news/2015/06/25/pilot-shortage-alpa-boeing-embry-riddle/29284047/">http://www.usatoday.com/story/news/2015/06/25/pilot-shortage-alpa-boeing-embry-riddle/29284047/</a>
2015-16 New	Unmanned Aircraft Job Training Opportunities: June 2015: "Auburn University is positioned to become a key training center for commercial operators of unmanned aircraft as it launches the nation's first FAA-authorized flight school for those piloting the aerial systems". The unmanned aircraft industry is in its infancy as we see Auburn University becoming the first of it's kind in June 2015. Mt. SAC is also positioned to become a go-to training source for unmanned systems because of our proximity to unmanned vehicle manufacturing industry and the quality of programs at Mt. SAC. Two manufacturers of unmanned aerial systems located nearby could be Advisory partners - AeroVironment (Monrovia), Astral Infiniti (Hacienda Heights)	<a href="http://www.madeinalabama.com/2015/06/faa-approved-uas-flight-school/">http://www.madeinalabama.com/2015/06/faa-approved-uas-flight-school/</a>
2016-17 New	FAA Mandated Avionic Upgrade: The FAA has mandated that by the year 2020 all aircraft will have "ADS-B In/Out" capability (ADS-B - Automatic Dependent Surveillance Broadcast). In the United States, ADS-B is an integral component of the NextGen national airspace strategy for upgrading and enhancing aviation infrastructure and operations. ADS-B could replace radar as the primary surveillance method for controlling aircraft worldwide. Local expert from an avionics shop used by the college advised to wait until 2017 for installation/upgrade because of new products and competition among avionics companies. Cost per aircraft will vary dependent upon existing avionics type.	<a href="http://www.faa.gov/nextgen/programs/adsb/">http://www.faa.gov/nextgen/programs/adsb/</a>
Year	<i>Add item</i> Internal Conditions, Trends, or Impacts	Data Sources
2015-16 New	Portable Modular Classroom/Office: The program needs a portable modular building at Brackett Airport for instruction, office, and flight simulation. The current facility is inadequate and has no quiet space for FAA flight testing, no clean air-conditioned space for flight simulators, and inadequate office space for one-on-one instruction. Possible location for portable modular building to the West or Northwest of hangar.	Portable Modular Classroom/Office in lieu of Bond construction project that is on hold.
2015-16 New	Flight Training/Brackett Airport: April 2015 a "rate driven increase" clause came into effect on the 25th year of the long-term lease at Brackett Airport. The clause states an increase of \$2900 per month beginning April 1, 2015. The total rate is approximately \$4700 per month (\$1800 per month plus rate driven increase of \$2900 per month). The college completed a cost analysis and the new monthly rate is commensurate with current market rates. The total cost increase for the District is \$34,800 annually.	The Tech & Health Division covered this expenses for 2015-2016 only.
2015-16 Cont'd.	Flight Training/Brackett Airport: The department plans on hiring an FAA Certified Aviation Mechanic to complete FAA mandated preventive maintenance, as well as unscheduled maintenance, on the college owned aircraft. The new position will be hourly, half-time 47.5%. The department will move \$30,000 over to the hourly budget from the existing maintenance budget. The two goals of this initiative are reduced down-time of aircraft for maintenance (impedes student progress) and reduced maintenance costs (commercial rates have increased).	Tech & Health Division

2015-16 Cont'd.	Flight Training/Brackett Airport: The district should permanently increase the annual aircraft maintenance budget by \$10,000 yearly to account for the additional aircraft added to the fleet. Last semester the District purchased a new American Champion Citabria Aircraft, the first factory new aircraft purchased by the District since 1978. The FAA mandates that aircraft utilized for flight instruction are inspected every 100 hours of operation (\$1500 two to four times a year) plus an annual inspection (\$2000 minimum). The additional funds are for unscheduled maintenance items.	Tech & Health Division
2015-16 Cont'd.	Flight Training/Brackett Airport: Cessna 172 Primary and Instrument Trainer for growth – the program cannot grow without adding a “primary and instrument training aircraft” to the fleet. We are turning away thirty to forty percent of students who apply for flight training annually. The program is constrained by the limited availability of primary training aircraft that are used for primary and instrument flight training. The most recent aircraft purchase, the Citabria, is a much needed emergency maneuver trainer but is not a primary trainer. An aircraft has a useful life that exceeds 30 years, a good use of district funds. The only on-going costs would include insurance (\$10,000 annually) and maintenance (\$10,000 annually). Long-term planning includes the purchase of a multi-engine aircraft, a pilot rating required for professional pilots, as the program grows and funds become available.	Tech & Health Division
2015-16 New	Flight Simulator Program: The department plans to hire a flight instructor to evaluate, improve, and manage the flight simulation lab. The department has secured funds to jump start this initiative, but would be looking for long-term hourly support. An additional goal would be the re-introduction of the AERO Flight Simulator Lab courses (basic, advanced) as well as additional offerings in the non-credit fee-based courses.	Tech & Health Division
2015-16 New	FAA Aircraft Dispatcher Certificate: The department developed and submitted a new FAA Aircraft Dispatcher course and certificate program in Spring 2015. The course and certificate are going through the curriculum process and expect approval in Fall 2015 with an initial offering Summer 2016. Upon approval the program will be unique to Southern California and the only other public college or university statewide is in Northern California. The program will need curriculum advise and support from the Division as it goes through the committee. The program will need some on-going resources once the program is fully developed and approved.	Tech & Health Division
2015-16 New	Full-time Faculty Request, and Adjunct Faculty Pool initiatives: The Aeronautics program does not have a need for an additional full-time faculty request at this time because of the decline in air traffic control enrollments related to FAA hiring practices. We may need an additional faculty member if the FAA were to reinstate the FAA CTI Program as the primary source of hiring. The Commercial Flight side the department is in the process of adding a new certificate in FAA Aircraft Dispatcher. As interest grows in Aircraft Dispatcher and Commercial Flight the department may request an additional full-time faculty to fulfill needs of the program and help the Commercial Flight side of the program grow.  On a related subject, our adjunct professor pool decreased as classes have been cut or canceled (budget related cuts and enrollment decreases in the FAA CTI program). In response, the program is actively searching for adjunct professors.	Tech & <a href="http://www.foxbusiness.com/industries/2015/06/10/congress-moves-to-cut-faa-funding/">http://www.foxbusiness.com/industries/2015/06/10/congress-moves-to-cut-faa-funding/</a> Health Division
2015-16 New	New Partnership: The Aeronautics program is exploring ways to partner with California Baptist University's Aviation Program (Riverside). The aviation program at CBU is quite new (2 years old). We have invited them to attend our Aviation Transfer Day scheduled for Fall Semester 2015. And, we have had initial discussions about multi-engine aircraft training.	Tech & Health Division
Year	<i>Add item</i> Retention and Success Data	Data Sources
2015-16 New	The department has two initiatives in this area: 1) For our degree programs our faculty will be analyzing the data and developing plans during our Fall department meetings. 2) The department chairs are working with the flight training supervisor and flight instructors on several initiatives regarding student retention and success.	<i>Cite Data Sources</i>

Year	<i>Add item</i>	Critical Decisions	Data Sources
2014-15		Faculty and Advisory Committee Members discussed and approved the new FAA Aircraft Dispatcher program and curriculum.	Advisory Committee
2014-15		Faculty and Advisory Committee Members discussed and approved hiring a part-time aviation mechanic for cost savings and improved access to aircraft (limiting down time during scheduled maintenance).	Advisory Committee
Year	<i>Add item</i>	Progress on Outcomes Assessment	Data Sources
2015-16 New		Division Dean advised the chairs to create a staggered course assessment plan as apposed to doing all courses in a single semester. In a previous aeronautics faculty retreat the full-time and adjunct professors agreed to complete the outcomes assessment on all courses during the same semester (2 year cycle). But, after reaching the end of the first cycle we found it difficult to get all faculty to turn in the results of the assessments. Having a staggered plan of action should ease the workload for all faculty and improve compliance.	Tech & Health Division



## IV. Alignment and Progress on Unit and College Goals: Closing the Loop

This section serves as a "reporting" function. It shows how your Unit closes the loop and connects planning to budget allocation: How did the prioritized college resources connect to your Unit's outcomes? What progress has your Unit made with the resources provided? Include progress on plans that did not require new resources if applicable. You are also prioritizing your Unit's progress or outcome for inclusion in your manager's summary. The **Plan Status** drop-down offers a time-frame update on the progress of your plan.

*Some information has been pre-loaded into this form by your manager. Add rows (+) as needed. Delete rows (X).*

Priority for Manager Summary	Plan from Previous PIE (2013-14) and Resources Obtained (if any)		Resources Secured (if any)	Progress/Outcomes/Result/Impact	Connected Goal/Theme
Med	Emergency Maneuver Training Aircraft		\$ \$202,000.00	The purchase of an American Champion Citabria Aurora emergency training aircraft was completed late May 2015. This purchase is significant in two ways: 1) positive impact on pilot safety and skill level; 2) The aircraft is the first factory new aircraft the district has purchased since 1978 (all other aircraft were purchased on the used market).	Technology
			Instr. Equipment		C. Secure Resources
	Plan Status	Complete	Source 2		
Med	(15) GPS Units		\$ \$2,137.34	The purchase of the "Bad Elf" GPS Units was completed Spring 2015. These tiny GPS units link with free software on student owned iPad type devices, and provide accurate GPS mapping on training flights and flying team activities. The data from each flight can be easily downloaded by an instructor and student for post flight analysis. The ability to save and distribute the actual flight path as part of instructor feedback is important and impressive.	Technology
			Instr. Equipment		C. Secure Resources
	Plan Status	Complete	Source 2		
High	Pseudo-pilot position w/software and maintenance contract		\$ \$31,655.50	The purchase of the Pseudo-pilot position for the Air Traffic Control Simulation lab was installed Fall 2014 and was utilized in classes Spring 2015 semester. The simulator position also included a software update for full integration into existing units and a one-year warranty. The main impact of simulation was that this unit allows integrated training between the ATC Tower simulator and the ATC Radar simulator. Instructors are now able to design integrated problems for arrival and departures very similar to real-world training. And, the software upgrade that was required also had significant updates that improved the radar accuracy and allowed more complex training scenarios.	Access for Students
			Perkins Grant		C. Secure Resources
	Plan Status	Complete	Source 2		

# SectionTwo

## Where We Are Going: Planning for the Next Three Years: 2015-16, 2016-17, 2017-18

### I. Planning Context - Unit Goals Assessed and Revised for: Aeronautics and Transportation

This table contains your goals as noted in Section One for 2014-15. Review your Unit's goals and revise, add new goals or remove goals that are no longer relevant as appropriate for planning for 2015-16, 2016-17, and 2017-18. *Add rows (+) as needed. Delete rows (X).*

Unit Goal Name	Unit Goal	<a href="#">College Theme</a>
Technology	Staying on the forefront of technology	C: Secure Resources
Access for Students	Support student access to department programs and services	B: Access and Success
Flight Training Facility	Facility improvements that maximize student learning	C: Secure Resources
Support Staff	Increase the effectiveness of department initiatives	C: Secure Resources
Partnerships	Explore partnership opportunitites	D: Cooperation/Collaboration





## II. Annual Implementation Plan for: Aeronautics and Transportation

This section serves as a "planning" function. This is where you ask for resources and record new action plans, activities, or interventions necessary to achieve success. It will also be used to record revisions to plans as needed across the three years of planning. *Add rows (+) as needed. Delete rows (X).*

Priority for Manager Summary	Plans, Activities, or Interventions		Resources Needed (if any)	Expected Outcomes / Criteria for Success	Connected Goal/Theme
High	Used aircraft for primary and instrument training		\$ 175,000.00 Instr. Equipment	Cessna 172 Trainer for growth – with budget problems after 2008 the college told the department to maintain but not grow the flight training program. The department wants to add student capacity to the flight training program by purchasing an additional Cessna 172. The District did purchase an emergency training aircraft last year but this aircraft cannot be used for primary training (insurance restrictions). A reminder, an aircraft has a useful life that exceeds 30 years, a good use of district funds. The only on-going costs would include insurance (\$10,000 annually) and maintenance (\$10,000 annually). Long-term planning includes the purchase of a multi-engine aircraft, a pilot rating required for commercial pilots, but we cannot reach or support that goal without having a stronger base of primary aircraft.	Technology
	Projected Completion	2015-16	Source 2		C. Secure Resources
High	Small trailer with at least three rooms for a simulator and quiet areas for one-on-one instruction		\$ 80,000.00 Facilities Mod.	The portable modular building would be used for instruction, flight simulation, and FAA testing. The building was on the Measure R and Measure RR construction list from 2006 to 2013. But, improvements were passed over in lieu of higher priority projects (plans made it to Sacramento three times over the years). With changing goals and priorities we feel a portable modular building is a perfect match for the needs of training at Brackett Airport.	Flight Training Facility
	Projected Completion	2015-16	Source 2		C. Secure Resources
High	Rate driven lease increase for airport hangar		\$ 34,800.00 Rate-Driven	The "rate driven increase" contract clause came into effect on the 25th year of the long-term lease at Brackett Airport. The clause states an increase of \$2900 per month beginning April 1, 2015. The total rate is approximately \$4700 per month (\$1800 per month plus rate driven increase of \$2900 per month). The college completed a cost analysis and the new monthly rate is commensurate with current market rates. The total cost increase for the District is \$34,800 annually.	Flight Training Facility
	Projected Completion	2015-16	Source 2		C. Secure Resources
High	Hire an Aviation Maintenance Technician for the Mt. SAC flight training facility		\$ 0.00 Staffing	The two goals of this initiative are reducing the down-time of aircraft for maintenance (impedes student progress) and reduced maintenance costs (commercial rates have increased two years in a row). The aviation mechanic position will be an hourly/half-time position (47.5%). The department will move \$30,000 over to the hourly budget from the existing maintenance budget.	Support Staff
	Projected Completion	2015-16	Source 2		C. Secure Resources
High	Hire Certified Flight Instructors as Mt. SAC		\$ 15,000.00	Currently students pay the Certified Flight Instructor directly. Additionally, flight instructors at Mt. SAC are not paid.	Support Staff

### III. Resources Identified in Relation to Planning

This section will serve the budget prioritization function in the Manager's PIE. Your manager will inform you when actual quotes are due.

## SectionThree

### Recommendations for Improving the Planning Process

What suggestions do you have for improving the planning process for your Unit?

The Adobe Acrobat formatting of this form (Section II. Annual Implementation Plan) has a flaw when trying to add additional activities (lines). When using the template and adding more than five items, the new item shows up below the grey "hard-rule line" and data is invisible below the grey line. The new item is there but cannot be seen or completed below the line.

What additional information should the College provide to assist your Unit's planning?

*Enter additional information suggestions here.*

Thank you for completing the Unit PIE form summarizing 2014-15, and initiating your Unit's planning for the 2015-16, 2016-17, and 2017-18 three-year cycle.

Please save this form and forward to your Unit's manager by 06/30/ 2015.

Questions regarding this form? Send an email to Don Sciore, Interim Associate Dean of Arts, member IEC, at [dsciore@mtsac.edu](mailto:dsciore@mtsac.edu)