# Santa Rosa Junior College

# **Program Resource Planning Process**

# Automotive Technology 2021

#### 1.1a Mission

The mission of the Automotive Technology program is to provide entry-level training to students interested in entering the Automotive Repair industry, and to provide updated and advanced training for individuals currently working within the Automotive Repair industry. This industry is constantly changing and developing, the cost of fuel constantly rising. This drives the need to develop new fuels and fuel control methods; electric vehicles, bio-fuel, hybrid vehicles. Our program is dynamic, and changes to meet the requirements of our local community and businesses.

We offer a learning environment that is open and affirming to all students, and our instructional programs are flexible to the needs of all students seeking training in their chosen occupational field. The Automotive Technology program fosters a learning environment that allows each student to develop the necessary skills to achieve their educational goals. Our faculty provides instruction that reflects the latest industrial advancements, updates program curriculum regularly, and attends training to remain current in their disciplines.

### 1.1b Mission Alignment

The Automotive Technology program is in perfect alignment with the District's Mission. We benefit the community we serve by: <a href="Increasing Knowledge, Improving Skills and Enhancing Lives">Increasing Knowledge, Improving Skills and Enhancing Lives</a>. Our students go into society ready to work, earn a living and contribute to the community.

We have also addressed the Student Learning Outcomes and Assessment initiative by completing all course and program SLOs, and are well on the way to completing our SLO assessments.

The Automotive program has also addressed the Community Outreach, Development & Involvement initiative through increased articulation with area high school vocational training programs, and sending department faculty to speak at local high schools.

### 1.1c Description

The Automotive Program offers day classes, which lead to a Certificate in Automotive Technology. This certificate series of classes provides the student with a general education in automotive theory of operation, repair shop procedures, and automotive repair tools and techniques. The student can choose to complete the certificate in 3, 4 or 5 semesters. A student who completes the certificate requirements and the necessary general educational requirements can also earn an A. A. Degree in Automotive Technology. The program also offers evening classes that provide continuous training opportunities for day certificate students and students working in the Automotive Repair industry (our evening classes have been drastically cut back due to the current budgetary constraints). The automotive program offers California Bureau of Automotive Repair approved classes that allow students to obtain or retain a Smog Check License.

To better serve the needs of our diverse student body, the Automotive Technology Progam has several skill certificates in place. These certificates are aligned with ASE training criteria, which means that they meet current industry standards. The certificates also give students a document of training verification and recognition that may be helpful in a job application process or to obtain a pay increase in an existing job. Many of our students, who do not have time to complete the full Automotive Technology certificate, find these certificates useful. The Auto Program currently offers skill certificates in the following areas:

- 1. Engine Repair Specialist Skills Certificate
- 2. Electric and Electronic Systems Specialist Skills Certificate
- 3. Brakes, Steering and Suspension Specialist Skills Certificate
- 4. Heating and Air Conditioning Systems Specialist Skills Certificate
- 5. Transmission Specialist Skills Certificate
- 6. Tune-Up and Electronics Specialist Skills Certificate
- 7. Powertrain Systems Performance & Electronics Specialist

### 1.1d Hours of Office Operation and Service by Location

In order to reach as many students as possible, the Automotive, Diesel, Welding and Machine Tool programs offer day and evening classes (although the current budget climate precludes the offering of most evening classes).

The service center is located in the Lounibos Center Bldg. the administrative office hours are 8:30 am to 12:30 pm Monday through Friday. The service center serves the Automotive, Diesel, Welding and Machine Tool Programs.

The Automotive Program shop area is open Monday through Friday from 8:00 a.m. until 5:00 P.M. During these hours there is an auto shop assistant in the shop area who can aid and direct students and answer their questions.

### 1.2 Program/Unit Context and Environmental Scan

The current economy has resulted in relatively high levels of employment. This has resulted in more students working in the community, and less pursuing full time education. Less full time students overall has led to lower funding levels and the budget cutbacks that follow. Department cutbacks mean less sections on offer and the result is that the Automotive Program's sections are overfull, and we have inadequate faculty to teach more sections due to lack of funding.

Changes over the next three years will be primarily in hybrid and electric vehicle growth. The industry is poised for very rapid expansion in these two areas. The infrastructure for production and support is almost in place, and in response to this anticipated need the Automotive Department is working hard to expand our Alternative Fuels program by creating both hybrid and electric vehicle training programs that benefit our students as they seek employment. In fact, we have

made our Introduction to Hybrid Vehicles a requirement for our full Automotive Technology certificate.

The Automotive Advisory Committee has been supportive and active in certifying the Automotive Program through NATEF (National Automotive Technician Education Foundation). SRJC's Automotive Program has been NATEF (the name has since been changed to ASCEF) accredited at their MAST (master) level since 2015.

This accreditation carries some weight with automotive manufacturers as they make decisions about vehicle donations and other forms of support.

The Automotive Advisory Committee also has been supportive and active in affiliating the Automotive Program with Subaru, Ford, and Toyota regarding the use of their internal technician training programs. This training is offered to our students free of charge and can be used to prepare themselves for entry level employment at dealerships across the country. These college / manufacturer alliances have benefitted all parties. Students find jobs, dealerships find employees, and the college gets access to vehicle donations and some proprietary software support.

The Automotive Program has existing tacit agreements with several local car dealerships to employ our students as apprentice level technicians. Several of these dealerships have also

volunteered to look for vehicle donations from their respective manufacturers, especially for donations of hybrid vehicles that will be necessary for our hybrid classes. We have also received offers from several employers on the advisory committee to allow students to "job shadow" auto technicians in their shops during the workday.

### 2.1a Budget Needs

The Industrial and Trade Technology Department has suffered from budget cuts in recent years, as well as the loss of all STNC and student help funds. With rising costs on many of our consumables and the difficulty in finding federal work study students it is becoming harder to maintain program standards.

Because Auto 109...BAR Update Training is of vital importance to the certified smog check technicians in the area (they must have this class to renew their BAR Smog Test license), we have moved it into Community Education and continue to offer it at a higher cost to the students.

The Automotive Program's supply budget has been cut and as a result the program has initiated a materials fee, where appropriate, for students in many of our sections and consolidated/organized our on-hand shop supply inventory.

An area of growing concern for the Automotive Technology Department is written in our name..."Technology". Every year working under extreme budget restraints puts us further behind in our ability to train SRJC students at the level requested by local employers. We have many high profile local employers on our advisory committee, and they all have the same response when we ask what they want our students trained in. The committee wants employees who are skilled in "the basics" and "computers, electronics, and technology as they apply to auto repair". It has been many years since our department has updated its technology, and the budget crisis is putting us further and further behind. A bright spot over the last several years has been CTEA and SWP funding, which has allowed us to purchase a new state-of-the-art wheel alignment machine, computerized tire balancer, updated tire mounting machine, new work benches and tool sets, and more; but the rest of our equipment is growing outdated and does not fulfill the needs of area employers.

Two more budget inadequacies that impact the Automotive Department are lack of student help in our lab, and lack of an adequate equipment repair budget. We are running large sections that utilize potentially hazardous equipment and we could certainly use help maintaining an adequately supervised and safe training environment. To accomplish this we need lab assistants. Also, much of our equipment is getting old and needs frequent repair, for which we need a greater repair budget.

Our budget is currently less than adequate to support these two areas of concern. A suggestion that would help us is to institute a rollover repair budget for our program; i.e. a repair budget that is dedicated to equipment repair only, is non-transferable, and can rollover from fiscal year to fiscal year. It would be used to repair the water treatment system, forklift, and other equipment used by all Lounibos programs. The way it is currently set up

the funds are "use or lose". Some years we go through our entire repair budget - plus more - in just a few months. Other years we barely tap into this fund, and have to either use it all or lose it. If we could have a rollover budget of \$2,000 a year that was allowed to accumulate year to year (any unused funds are moved to the next year), we could do repairs as needed, but also "save up" for major repairs.

# Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2019-20

#### 2.1 Fiscal Year Expenditures

Santa Rosa Campus

Expenditure Category	Unrestricted Funds	Change from 2018-19	Restricted Funds	Change from 2018-19	Total	Change from 2018-19
Faculty payroll	\$88,792.70	-11.77%	\$0.00	0.00%	\$88,792.70	-11.77%
Adjunct payroll	\$152,466.91	-8.50%	\$2,000.00	-18.45%	\$154,466.91	-8.65%
Classified payroll	\$68,113.14	5.96%	\$36,354.71	-1.06%	\$104,467.85	3.41%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$36,019.40	-12.52%	\$0.00	0.00%	\$36,019.40	-12.52%
Benefits (3000's)	\$105,200.90	-0.35%	\$16,267.06	1.49%	\$121,467.96	-0.11%
Supplies (4000's)	\$9,632.99	-49.32%	\$0.00	0.00%	\$9,632.99	-49.32%
Services (5000's)	\$2,478.71	-41.18%	\$18,728.80	>1000%	\$21,207.51	280.91%
Equipment (6000's)	\$0.00	0.00%	\$137,300.80	30.86%	\$137,300.80	30.86%
Total Expenditures	\$462,704.75	-7.74%	\$210,651.37	30.43%	\$673,356.12	1.56%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Expenditure Category	Unrestricted Funds	Change from 2018-19	Restricted Funds	Change from 2018-19	Total	Change from 2018-19
Faculty payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Adjunct payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Benefits (3000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Supplies (4000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Services (5000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Equipment (6000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total Expenditures	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%

### Other Locations (Includes the PSTC, Windsor, and other locations)

Expenditure Category	Unrestricted Funds	Change from 2018-19	Restricted Funds	Change from 2018-19	Total	Change from 2018-19
Faculty payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Adjunct payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Classified payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
STNC payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Student payroll	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Management payroll (and Dept Chairs)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Benefits (3000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Supplies (4000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Services (5000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Equipment (6000's)	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total Expenditures	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%

**Expenditure Totals** 

Expenditure Category	Amount	Change from 2018-19	District Total	% of District Total
Total Expenditures	\$673,356.12	1.56%	\$153,674,065.73	0.44%

Total Faculty Payroll	\$243,259.61	-9.81%	\$49,910,820.26	0.49%
Total Classified Payroll	\$104,467.85	3.41%	\$22,755,404.45	0.46%
Total Management Payroll	\$36,019.40	-12.52%	\$10,011,188.67	0.36%
Total Salary/Benefits Costs	\$505,214.82	-5.30%	\$109,759,005.10	0.46%
Total Non-Personnel Costs	\$168,141.30	29.84%	\$14,465,624.56	1.16%

# 2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	Santa Rosa	04	02	\$15,000.00	Cost to maintain equipment has been rising, and as equipment ages preventive maintentance is needed to reduce repair costs.
0001	Santa Rosa	04	07	\$0.00	The Lounibos Air Compressor will need replacement soon!
0002	Santa Rosa	04	01	\$18,000.00	Our expenses for supplies are rising every year due to impacted classes.  More students means more supplies used, and more wear-and-tear costs.
0003	Santa Rosa	01	02	\$1,200.00	To cover yearly maintenance on Hotsy pressure washer and parts washer
0004	Santa Rosa	01	01	\$1,000.00	To cover increasing costs of graphics

# 2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant II	20.00	12.00	Keeps the programs running in all respects concerning the Lounibos Trade Technology Center officeProvide front-line customer service to students and instructors
			-Attend department meetings, take minutes.
			-Responsible for advisory committee needs including maintenance of membership database, email notifications to members, meeting room reservations, food service contracts, parking accommodations, generate member name tags, attend meetings and take meeting minutes.
			-Generate and track purchase requisitions using Escape software
			-Point of contact for faculty absences: Notification of lab staff, post signs, process NOAs
			-Collect and file course syllabi, proof syllabi for required content, send regular reminders to instructors.
			-Monitor Computer Studies and Graphic Design budget
			-Generate and track requisitions using Escape software
			-Complete Payment Request forms and submit for processing
			-Track and submit blanket purchase order receipts
			-Access student data in SIS
			-Maintain department course files
			-Prepare new course proposals and course revisions in CATS and track courses through curriculum process
			-Maintain various department files
			-Order and keep inventory of office supplies
			-Assist in development of scheduling proofs
Auto Shop Assistamt	40.00	12.00	Organizes and manages the autoshop activities. Orders supplies, monitors the all shop activities, accounts for shop tools handed out and checked in, controls the flow of work projects in and out of the shop, takes care of shop mainternance and repair activities.
SLIA	40.00	10.00	ITT SLIA
	40.00	0.00	

# 2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Department Chair	18.00	12.00	Evaluates faculty and staff, coordinates classes, reviews curriculum, on call for any problems.  Trains new faculty, reviews and implements purchase orders, budget transfers, scheduling, and curriculum. Note: this position is shared by four programs (Machine Tool, Automotive, Diesel, and Welding). Serves on department advisory committees (Machine Tool, Automotive, Diesel, and Welding).

#### 2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties

### 2.2d Adequacy and Effectiveness of Staffing

The Industrial and Trade Technology department is significantly understaffed compared to the district averages, and the figures below will support this statement. The programs generate significant FTES with minimal staffing. The vast majority of lab classes, especially evening and weekend classes, have no lab assistant support; and the faculty are required to set up and run their own labs, while also working the tool room. It is in the best interests of our students to utilize a lab assistant in all of our lab classes (this is true from a safety aspect as well as instructional).

We need additional classified staffing to manage the automotive lab during all sections and hours of operation: day, evening, and weekend classes. This new classified staff person would also coordinate with our current daytime shop manager to fill in for each other during vacation periods or during time off required by personal affairs. Please note that currently the automotive instructor or instructors working evenings or weekends are responsible for securing the tool room, monitoring shop safety, handing out tools and equipment, and acquiring job materials and supplies. This overload of responsibility for the instructor comes at the detriment of instruction and personal attention given our students, and negatively affects the quality of education that we are providing the students.

We also need funding for 25 hours a week of lab assistants to maintain shop and equipment. Having to rely only on federal work study students has severely limited our hiring options to the point of many times not being able to find someone qualified to work in the shop.

Additional hours for the Service Center Administrative Assistant are essential, as this assistant provides necessary duties to five instructional areas and will be needed as the job duties increase with added responsibility. A 100% position is indicated by the constant state of "catch-up" that we are playing with the logistics and paper work in the Industrial & trade Technology Department!

Santa Rosa Junior College - Program Unit Review

# Automotive Technology - FY 2019-20

## 2.2 Fiscal Year Employee Data and Calculations

**Employee Head Counts** 

Employee Category	Count	Change from 2018-19	District Total	% of District Total
Contract Faculty	1	-50.00%	0	0.00%
Adjunct Faculty	9	0.00%	0	0.00%
Classified Staff	2	0.00%	0	0.00%
STNC Workers	0	0.00%	0	0.00%
Student Workers	0	0.00%	0	0.00%
Mgmt/Admin/Dept Chair	3	-25.00%	0	0.00%

**Employee FTE Totals** 

FTE Category	FTE	Change from 2018-19	District Total	% of District Total
FTE-F - Faculty	2.8110	-57.60%	0.0000	0.00%
FTE-CF - Contract Faculty	1.0000	-50.00%	0.0000	0.00%
FTE-AF - Adjunct Faculty	1.8110	-60.88%	0.0000	0.00%
FTE-C - Classified	2.0000	0.00%	0.0000	0.00%
FTE-ST - STNC	0.0000	0.00%	0.0000	0.00%
FTE-SS - Support Staff	2.0000	0.00%	0.0000	0.00%
FTE-SW - Student Workers	0.0000	0.00%	0.0000	0.00%
FTE-M - Management	0.7670	-1.67%	0.0000	0.00%
FTE-DC - Department Chairs	0.0000	0.00%	0.0000	0.00%

#### **Student Data**

Data Element	Value	Change from 2018-19	District Total	% of District Total
FTES-CR - Credit	49.7558	-57.14%	0.0000	0.00%
FTES-NC - Non-Credit	0.0000	0.00%	0.0000	0.00%
FTES - combined	49.7558	-57.14%	0.0000	0.00%
Students Enrolled/Served	0	-100.00%	0	0.00%

#### **Calculations**

Data Element	Value	Change from 2018-19	District Total	% of District Total
FTE-S: FTE-F	17.7002	1.08%	0.0000	0.00%
FTE-AF: FTE-CF	1.8110	-21.77%	0.0000	0.00%
FTE-F: FTE-SS	1.4055	-57.60%	0.0000	0.00%
FTE-F: FTE-M	3.6650	-56.88%	0.0000	0.00%
FTE-SS: FTE-M	2.6076	1.69%	0.0000	0.00%
FTE-ST: FTE-C	0.0000	0.00%	0.0000	0.00%
Average Faculty Salary per FTE-F	\$86,537.55	112.72%	\$0.00	0.00%
Average Classified Salary per FTE-C	\$52,233.93	3.41%	\$0.00	0.00%
Average Management Salary per FTE-M	\$46,961.41	-11.03%	\$0.00	0.00%
Salary/Benefit costs as a % of total budget	75.03%	-6.76%	71.42%	105.05%
Non-Personnel \$ as a % of total budget	24.97%	27.85%	9.41%	265.27%
Restricted Funds as a % of total budget	31.28%	28.43%	19.16%	163.25%
Total Unit Cost per FTE-F	\$239,540.75	139.53%	\$0.00	0.00%
Total Unit Cost per FTE-C	\$336,678.06	1.56%	\$0.00	0.00%
Total Unit Cost per FTE-M	\$877,908.89	3.28%	\$0.00	0.00%
Total Unit Cost per FTE-S	\$13,533.22	136.96%	\$0.00	0.00%
Total Unit Cost per student served/enrolled	\$0.00	-100.00%	\$0.00	0.00%

**2.2a Classified Positions** Employees paid from a Classified OBJECT code

Name Last	First	Hours	FTE	
Davis	Frederick	Science Laboratory Instructional Assistant	0.00	1.0000
Yoast	David	Auto Shop Assistant	0.00	1.0000
Totals			0.00	2.0000

2.2b Management/Confidential Positions Employees paid from a Management/Confidential OBJECT code

Name Last	First	Position	Hours	FTE
Kosten	Jesse	Faculty	0.00	0.6670
Lemmer	David	Faculty	0.00	0.0500
McCracken	William	Faculty	0.00	0.0500
Totals			0.00	0.7670

### 2.2c STNC Workers Employees paid from an STNC OBJECT code

Name Last	First	Position	Hours	FTE
<< No Employees >>				

**2.2d Student Employees** Employees paid from a Student Employee OBJECT code

Name Last	First	Position	Hours	FTE
<< No Employees >>				

# 2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Santa Rosa	01	01	Lounibos Service Center Administrative Assistant	100% Lounibos Service Center Admin Assistant	Classified
0002	Santa Rosa	01	01		Night Auto Shop tool room monitor 10 months	Classified

# 2.3a Current Contract Faculty Positions

Position	Description
1	Automotive Instructor: specialized in electrical, electronics, computer systems, hybrid vehicles, and engine performance (including smog laws and procedures)
2	Automotive Instructor (New Hire for F2021)

### 2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
Automotive	2.2700	28.3700	5.7300	71.6300	Our full-time/part-time ratio is roughly 28/72, opposite of the ideal 70/30.

### 2.3c Faculty Within Retirement Range

Three of the adjunct faculty are retired SRJC faculty.

# 2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

Currently the automotive department employs 2 full time faculty instructors. The department also has 5 adjunct instructors who are currently teaching, and most of these adjunct instructors have full-time day employment. It has been difficult to locate qualified licensed and credentialed automotive technicians who are willing to take a cut in pay to become adjunct instructors.

We must hire an additional full time instructor. As the demand improves, the automotive department will need to offer more sections to fulfill the community needs, and <u>this will require more faculty</u> and our full time to part time faculty ratio is upside down as it is.

To remain a California Bureau of Automotive Repair (BAR) licensed training institution we are required to: maintain contact with the BAR, keep curriculum in compliance with state training standards, receive and review all updates, maintain records, and ensure that we are in compliance with California regulations. We are audited by the BAR on a biannual basis, during which the auditor checks our equipment, materials, facilities and record maintenance for the official BAR classes. The faculty member responsible for all the above BAR duties must be licensed by the State of California. This person is now a retired instructor working as an adjunct.

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#### 2.3a Contract Faculty Positions Employees paid from a Contract Faculty OBJECT code

Name Last	First	Position	Hours	HR FTE	DM FTE
Lemmer	David	Faculty	0.00	1.0000	0.0000
Totals			0.00	1.0000	0.0000

#### 2.3b Adjunct Faculty Positions Employees paid from an Adjunct Faculty OBJECT code

Name Last	First	Position	Hours	FTE
Adelman	Paul		188.00	0.2990
Ebner	Andrew		287.50	0.3420
Fleming	Sean		207.00	0.1522
Kosten	Jesse		79.00	0.1188
Lemmer	David		44.00	0.5668
Miller	Robert		390.00	0.3323

Norton	Clifford	157.00	0.0000
Roman-Medina	Juan	83.00	0.0000
Williams	Eric	31.00	0.0000
Totals		1466.50	1.8110

# 2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0001	Santa Rosa	08	01	Automotive	Automotive Technology needs one additional full-time faculty member to maintain full time to part time ratio requirements. This is needed to support the large number of students enrolled and provide the best training to our students.

# 2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

#### **ASE-EF Accreditation:**

As of September 2016, SRJC has been accredited as a ASE EF (Automotive Service Excellence Education Foundation) MAST (Master Automotive Service Technician) level educational facility. This process has been endorsed and applauded by our advisory committee as a positive move for the automotive department. To maintain this accreditation requires meeting ASE-EF equipment, faculty, safety, and facilities standards; to meet these standards will require most of the items denoted below, plus additional items unknown at this time.

#### **Training Vehicles:**

Our vehicle fleet used to train students is old and much worn. We desperately need new vehicles to train our students. The SRJC Foundation is currently contacting local car dealer owners to inquire about vehicle donations. The automotive program needs vehicles ongoingly that are relatively new (6 years old and newer), to train our students to service the type of vehicles that are currently on the road. Some older vehicles are useful, but should not comprise our total fleet.

We have offered our Intro to Hybrid Vehicles class for many semesters now with just one Toyota Prius and one Toyota Camry for the students to train on. We have asked several area dealerships for donations of older hybrid vehicles, but we should plan on purchasing at least two vehicles with our own funds to ensure that we have adequate vehicles to run a quality lab class.

Note: We have recently received donations of a 2015 Toyota Camry (donated by Toyota of North America after our NATEF certification) and a 2014 Ford Fiesta (donated by AAA), but we are still in need of four to six vehicles for use in our general lab activities. The vehicles that we are using are early to mid-nineties production cars. They are not what we should be training our students on, as they are fading into irrelevance.

#### **Safety Glasses Cabinet-Sanitizer:**

Our automotive lab needs a safety glasses cabinet/sanitizer near the entrance to the lab. It is industry standard safety procedure to have visitors, and all others who enter an active industrial work area, wear proper eye protection and, if applicable, hearing protection and a hard hat. We have never had such a capability in any of our Industrial & Trade Technology labs. It is very important that we have these safety protocols in place to limit our liability, and also to comply with the standards of our various national certification bodies such as: NATEF (National Automotive Technicians Education Foundation); NIMS (National Institute for Metalworking Skills); AWS (American Welding Society)

#### **Transmissions and Drivelines:**

The driveline class is in constant need of automatic and manual transmissions as well as other driveline components such as: driveshafts, rear axle/differentials, transfer cases, hybrid transaxles, and more.

SRJC also needs an automatic transmission dynamometer to dynamically test the function of automatic transmissions that our students have disassembled and reassembled. This is a vital part of their training, as it verifies that the transmission has been properly reassembled; this verification is impossible visually.

See Transmission Dyno below

#### **Automotive:**

Equipment in the shop is old, and not aging well. We need new equipment to keep current with industry technology. We need to replace tools as they age, break, and in some cases get stolen due to lack of tool room staff coverage during night and weekend classes.

In many cases our shop equipment (and classroom equipment) has slipped below industry expectations and standards. We have borrowed from other programs when it is possible, and have relied heavily on industry donations to get us by, but these strategies only give us a portion of what we need.

Underway with SWP funding 2017/2018

**All-Data and Mitchell-On-Demand Update:** It is essential that we update our Mitchell-On-Demand and All-Data auto repair reference systems. They are on a year to year subscription basis online, and will be an ongoing annual expense. Keeping the subscriptions current is essential because publishers no longer print service manuals; and when the subscription for online access expires, the system shuts down and we have no information to teach or perform repairs with.

**Transmission Dyno:** A transmission dynamometer would be a very beneficial teaching tool for our automatic transmission classes. Without one, the students are not held to a very high standard of skill and understanding concerning disassembly, diagnosis, and repair of automatic transmissions. It is relatively easy for a student to talk his or her way through an explanation of how the transmission works and point out the internal parts, but a much more difficult task to actually make it function. A transmission dynamometer would allow the transmission instructor to bolt the transmission to a power drive source (engine) and operate it under simulated driving conditions while observing internal pressures and monitoring gear shift points. It is an empirical test of the student's skill and a real dose of reality for the student.

This is currently under discussion (2018) with the automotive advisory committee. A new plan to use a small fleet of typical vehicles for students to R&R transmissions is being considered. Students could also use the automatic transmissions for disassembly, operational description and reassembly. These transmissions would also need to prove functional capability when put back in the vehicle.

**Engine Balancing Equipment:** A device to teach static and dynamic balancing of internal engine components would be a great aid in teaching students how critical the weight, straightness, and alignment of engine rotating components are. It is a visual and hands on experience for them that will be beneficial throughout their careers, whether they go into engine repair work, engine vibration diagnosis, or general automotive repair and servicing.

**I&TT Department Computer classrooms:** We need to have both classrooms upgraded to support computer use by our Automotive, Machine Tool and Welding departments for in class activities and assignments.

# 2.4c Instructional Equipment Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	04	01	Media Classroom Conversions	1	\$40,000.00	\$40,000.00	David Lemmer	2347	David Lemmer
0002	Santa Rosa	02	01	"Hideaway" computer desks and chairs on 1 quote	48	\$1,560.00	\$75,000.00	Industrial and Trade Tech	2320, 2329	Jesse Kosten
0003	Santa Rosa	01	07	Lounibos computer desk chairs	48	\$250.00	\$12,000.00	Industrial and Trade Tech	2320, 2329	David Lemmer
0004	Santa Rosa	01	01	Training Vehicles	6	\$12,000.00	\$72,000.00	David Lemmer	2360	David Lemmer
0005	Santa Rosa	06	07	Safety Glasses Cabinet & other safety upgrades	6	\$2,000.00	\$12,000.00	David Lemmer	2360	David Lemmer
0006	Santa Rosa	01	01	Vehicles for automatic transmission class use	8	\$7,000.00	\$56,000.00	David Lemmer	2360	D Lemmer/P Adelman
0008	Santa Rosa	01	01	Valve renewal equipment replacement	2	\$55,000.00	\$55,000.00	David Lemmer	2360	D Lemmer/ R Miller
0009	Santa Rosa	01	01	Engine Balancing Equipment	1	\$50,000.00	\$50,000.00	David Lemmer	2360	D Lemmer/R Miller
0011	Santa Rosa	01	01	Transmission Dyno	1	\$125,000.00	\$125,000.00	David Lemmer	2360	D Lemmer/P Adelman

# 2.4d Non-Instructional Equipment and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	04	07	Lounibos conference/meeting area tables	5	\$600.00	\$3,000.00	T.Hruby	2319	David Lemmer
0002	Santa Rosa	04	07	Lounibos conference/meeting area 25 Chair	25	\$300.00	\$10,000.00	T. Hruby	2319	David Lemmer

# 2.4f Instructional/Non-Instructional Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	02	01	Yearly Upgrade of Mfr. Scantools	3	\$1,000.00	\$3,000.00	David Lemmer	2360	David Lemmer
0002	Santa Rosa	02	01	Yearly Upgrade of aftermarket Scantools	8	\$800.00	\$6,400.00	David Lemmer	2360	David Lemmer
0003	Santa Rosa	02	06	Annual online student safety test (records online)	3	\$250.00	\$750.00	David Lemmer	2360, 2370, 2395	David Lemmer
0004	Santa Rosa	02	01	Repair data access & vehicle diag software updates	1	\$10,000.00	\$10,000.00	David Lemmer	2360	David Lemmer

# 2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Santa Rosa	04	01	Urgent	Lounibos	2347, 2389, & 2330	\$60,000.00	Cool down classrooms 2347 and 2330 during the Spring, Summer, & Fall period. Have had to cancel class due to extreme temperatures, particularly when machines are in operation. This creates a very real health and safety hazard for the students.
0002	Santa Rosa	04	01	Urgent	Lounibos	2347 Lecture Theater	\$15,000.00	Remove theater seating and tiered flooring, refinish floor in preparation for classroom upgrade.
0003	Santa Rosa	04	07	Urgent	Lounibos	2360 Rear Storage Area	\$117,500.00	Overhead cover for our cars and equipment stored outside along the Lounibos compound West wall.
0004	Santa Rosa	04	01	2-3 Yr	Unknown	Unknown	\$0.00	Double the automotive department's square footage and include a body shop training facility. As part of the building improvement, Machine Tool and Welding facilities should also be expanded, while moving Diesel program to Shone Farm to allow training students on heavy equipment.

### 2.5b Analysis of Existing Facilities

Existing facilities are not adequate in space, storage or technology. SRJC should consider building a new Industrial Trade Technology facility, complete with an adequately sized diesel equipment shop, an auto body shop training section, an advanced production section, an automotive complex, and a large, state-of-the-art welding shop. If we want to be a focal point for trade technology training in Northern California, and to do our very best for the community, we will need a new complex. A large and modern training facility that expands on our initiative to train our students in a skill-trade that will allow them to go to work in our community.

In the meantime, we need an additional covered storage area along the West wall of the Lounibos compound to prevent weather damage to our vehicles and equipment that are stored outside.

Media Enhanced Classrooms are a necessary update to educate our students in the twenty-first century. As a stop gap minimum, we need to have multimedia projectors installed in our classrooms. This type of media based training is effective and is the most common training medium in use by auto and truck manufacturers today. As such, it is completely appropriate for our students.

\*To all those involved in getting us our first media enhanced classroom (due during summer of 2012), thank you very much from all of us in the Automotive Department!

2018 note: the 2012 updated classroom has already drifted into out-of-date status, and needs to be refitted with newer teaching technology.

Current classrooms have not been painted since the building was built 40 years ago, and their appearance is appalling.

Many bricks have fallen off the outside facade of the Lounibos building, making it look forlorn and tacky. This should be an easy repair, but <u>all requests have been ignored so far</u>. <u>This is a dreadful image to put forth to the public!</u>

These are both inexpensive jobs that will enhance our students' experience and make us look dignified to the public.

### 3.1 Develop Financial Resources

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### 3.2 Serve our Diverse Communities

We hire through the SRJC Human Resources department using the standard recruitment methods.

We try to recruit both students and instructors from local businesses that service a wide demographic area. Also, the Automotive Department encourages faculty participation in classes and flex sessions (offered on or off campus) that broaden our staff's cultural awareness and sensitivity.

### 3.3 Cultivate a Healthy Organization

The Automotive Department supports the professional development of our classified staff by allowing them time during normal work hours to attend training sessions. These sessions are designed to train the employees in subject areas that allow them to better do their jobs. Examples of these subjects are: PRPP writing, CIS, forklift safety and operation, first-aid, CPR, and any other training applicable to their jobs.

Our faculty members, both contract and adjunct, are encouraged to attend automotive training seminars offered both on-campus and off. These training sessions are usually certified for flex credit, and if the session requires travel, the costs can be funded with a mini CTEA grant.

### 3.4 Safety and Emergency Preparedness

We have one safety leader and one safety coordinator in our unit (but not in our Automotive Program)

### 3.5 Establish a Culture of Sustainability

## **SRJC's Core Values for Sustainability**

- Aspire to Zero Waste
- Use Renewable Resources for Energy
- Integrate Source Reduction Strategies
- Practice Local & Organic Food Sourcing
- Use Green Building Principles in all Projects
- Limit Greenhouse Gas (GHG) Emissions (Climate Protection)
- Purchase Using Fair Trade Guidelines
- Integrate Sustainability Throughout Curriculum

Our Automotive Program is located in Lounibos Hall. The following clip from SRJC's sustainability website shows that even our building is active in the college's sustainability goals!

### **Lounibos Photovoltaic Project**

After one year of operation, the project generated 80 kW of electricity at peak output, and has been augmented to add 30 kW more capacity. The original rebate was over \$300,000, and the new addition qualified SRJC for an additional rebate.

The following two clips from the sustainability website point out the college's interest in the growth of sustainable transportation. In the Automotive Technology Program we require our Intro to Hybrid Vehicles class be completed to obtain an Automotive certificate.

We also offer classes in alternative fuels and electric car theory, function, and construction (unfortunately, these classes are currently not offered due to budget cutbacks).

#### **Electric Vehicles**

SRJC is replacing aging vehicles in its fleet with electric and hybrid service vehicles to reduce emissions and lower fuel costs.

Improvement of transportation efficiency to reduce petroleum consumption, improving fleet fuel efficiency, utilizing alternative fuel vehicles (AFVs) and alternative fuels

### **Transportation Alternatives**

SRJC's Industrial and Trade Technology Department – Alternative Fuels, Hybrid Automobiles, Electric Cars, Diesel Technology.

This clip talks about SRJC's technical training in sustainable fields. Our Automotive Program is one of those fields.

### **Career and Technical Education**

Santa Rosa Junior College's expert faculty, strong connections to North Bay employers, and more than 160 career skills certificates ensure that businesses and their employees have access to instruction that is timely and focuses on current technology and practices. See the <a href="Career and Technical Education site">Career and Technical Education site</a> and the <a href="Certificates page">Certificates page</a> for more information.

In addition to all of the above items, Automotive Technology has been recycling for years. All of our oil, antifreeze, brake fluid, batteries and hazardous chemicals are recycled or disposed of properly. We recycle paper, cardboard and metal, and all of our wash rack water is captured, treated, cleaned and reused at the wash rack facility.

We are attempting to save district funds by turning off lights, we are cutting back on copies and attempting to do more handouts either online, or on disk. On faculty member is going to be taking Moodle Boot Camp and try to put a hybrid course online.

### **4.1a Course Student Learning Outcomes Assessment**

We have worked exhaustively with our advisory members to construct meaningful course SLOs, and the Automotive Department's SLOs have all been written. We are now beginning the process of writing our assessment protocols and will continue the process through 2011 - 2014. Our goal is to have one assessment written for each course by the end of Fall 2012.

As of Spring 2014 we have assessed all currently offered automotive courses. As the result of our assessments we have made adjustments to courses as indicated by assessment results, and we will reevaluate these courses during the next assessment cycle.

Please note the table below to view schedule and completed assessments:

# AutoTechnology; Course SLO Assessment Six Year Cycle

Course		F2011	S2012	F2012	S2013	F2013	S2014	F2014	S2015
Auto 51 -	Auto Engines		X (SLO 3)					Х	

	·	1	1	1	·		
X (SLO 3)					Х		
			X (SLO 2)				;
	X (SLO 1)						
	X (SLO 3)						
		X (SLO 1)					
				X (SLO 1)			
				X (SLO 2)			
				X (SLO 1)			
	X (SLO 3)	X (SLO 1)	X (SLO 1) X (SLO 3)	X (SLO 2) X (SLO 1) X (SLO 3)	X (SLO 2)  X (SLO 1)  X (SLO 3)  X (SLO 1)  X (SLO 1)  X (SLO 1)  X (SLO 2)	X (SLO 2)  X (SLO 1)  X (SLO 3)  X (SLO 1)  X (SLO 1)  X (SLO 1)  X (SLO 2)	X (SLO 2)  X (SLO 1)  X (SLO 3)  X (SLO 1)  X (SLO 1)  X (SLO 1)  X (SLO 2)

X=Scheduled
X=Completed
Required Courses
*Not Currently Offered

# **4.1b Program Student Learning Outcomes Assessment**

The Automotive Department has completed all course level SLOs, and we have completed our initial assessment of all certificates. We are using a "bottom up" assessment model to evaluate ourcertificates, and At SRJC, our cycle is each certificate/major must be assessed at least once every six years.

Please refer to the table below to view our schedule and completions:

## Automotive Technology; Certificate Assessment Six Year Cycle

	Semester						
Course	F2011	S2012	F2012	S2013	F2013	S2014	F2014
Certificate: Engine Repair Specialist			С				Х
Certificate: Transmission Specialist				С			

Certificate: Brakes, Steering and Suspension Specialist		С		
Certificate: Electrical and Electronics Systems Specialist			С	
Certificate: Heating and Air Conditioning Systems Specialist			С	
Certificate: Tune-Up and Electronics Specialist			С	
Certificate: Automotive Technology			С	
X=Scheduled				
C=Completed				

Automotive Technology Certificates

\*Not Currently Offered

4.1c Student Learning Outcomes Reporting	

Туре	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented	
Course	Auto 51 - Auto Engines	Spring 2012	Spring 2012	N/A	
Course	Auto 52 - Engine Per/Poll Cont	Fall 2011	Spring 2012	N/A	
Course	Auto 53 - Auto Drive Train	Spring 2013	Spring 2013	Spring 2013	
Course	Auto 54 - Brakes,Strg., Susp.	Spring 2012	Spring 2012	N/A	
Course	Auto 56 - auto electric system	Spring 2012	Spring 2012	N/A	
Course	Auto 100 - Intro Auto Tech	Fall 2012	Spring 2013	N/A	
Course	Auto 108 - clean air car cours	Fall 2013	Spring 2014	Fall 2014	
Course	Auto 194 - Intro Hybrd Vehicle	Fall 2013	Spring 2014	Spring 2014	
Course	Auto 125 - Heating and A/C	Fall 2013	Fall 2013	N/A	
Course	Auto 110 - Electric/electronic	N/A	N/A	N/A	
Course	*Auto 111 - Engine performance	N/A	N/A	N/A	
Course	Auto 112 - Driveability/Emiss.	N/A	N/A	N/A	
Course	Auto 190.1 - Alt Fuels & Syst	N/A	N/A	N/A	
Course	Auto 190.1L - Alt Fuels Lab	N/A	N/A	N/A	
Course	Auto 191 - Advanced Alt Fuels	N/A	N/A	N/A	
Course	Auto 193.1 - Electric Vehicles	N/A	N/A	N/A	
Course	Auto 195 - Hybrid Veh. Safety	N/A	N/A	N/A	
Course	Auto 109 -Bar Update Training	N/A	N/A	N/A	
Certificate/Major	Tune-up & Electronics	Spring 2014	Spring 2014	N/A	
Certificate/Major	Engine Repair Specialist	Fall 2012	Fall 2012	N/A	
Certificate/Major	Transmission Specialist	Spring 2013	Spring 2013	Spring 2010	
Certificate/Major	Brakes, Strg. and Susp.	Spring 2013	Spring 2013	N/A	
Certificate/Major	Electrical & Electronics	Spring 2014	Spring 2014	N/A	
Certificate/Major	Auto HVAC	Spring 2014	Spring 2014	N/A	
Certificate/Major	Auto Technology Certificate	Spring 2014	Spring 2014	N/A	
Certificate/Major	Auto Technology Major	Fall 2014	Fall 2014	N/A	

## 4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
Auto 100 Introduction	X	X	X	X			X	X	X	X	X	X				X
Auto 126 Air Conditioning	X	X	X	X	X		X	X	X	X	X	X				X
Auto 151 Engines	X	X	X	X			X	X	X	X	X	X				X
Auto 154 Brake/Chassis	X	X	X	X			X	X	X	X	X	X				X
Auto 52	X	X	X	X			X	X	X	X	X	X				X
Auto 53	X	X	X	X			X	X	X	X	X					
Auto 56	X	X	X	X			X	X	X	X	X	X				X

## 4.2b Narrative (Optional)

All of our courses have components of the institutional student learning outcomes. In reviewing the data it appears that we are strong in most of the goals and only failing to meet the institutional student learning outcome regarding personal health. We will implement this institutional student learning outcome in our program in the future.

#### **5.0 Performance Measures**

We are a BAR Certified Auto Repair Training facility. Instructors are all ASE certified. We are NATEF (MAST) certified.

# 5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

The Industrial and Trade Technology department offers both day and evening courses and has recently started offering weekend classes. We have not expanded to other campuses/sites as there are no shop

facilities available at the present time, and budget constraints are dictating that we shrink our programs, not expand them.

We do not offer a distance learning component as all the current classes are hands on. We are trying to identify courses that can be modified to in such a manner as to allow offering them as hybrid classes.

We would be better able to serve our students if we had more equipment available for them to learn on

# Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2017-18 (plus current FY Summer and Fall)

#### **5.1 Student Headcounts** The number of students enrolled in each Discipline at first census (duplicated headcount).

**Santa Rosa Campus** 

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2013
Automotive Technology	69	258	247	57	235	230	54	177	2

Petaluma Campus (Includes Rohnert Park and Sonoma)

<u> </u>									
Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Automotive Technology	0	0	0	0	0	0	0	0	

#### Other Locations (Includes the PSTC, Windsor, and other locations)

_										
	Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	Automotive Technology	0	0	12	0	0	8	0	0	

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Automotive Technology	69	258	259	57	235	238	54	177	2

## 5.2a Enrollment Efficiency

These figures are not an accurate reflection of our program's performance. I did a quick calculation of the Automotive Technology Department's enrollment efficiency for Spring 2011 and came up with 125% enrollment efficiency! Class size has been about the same for the last several semesters, therefore past figures also appear incorrect. My calculation of 125% efficiency is based only on instructor lead classes and does not include non-traditional sections.

It appears that there are data calculation problems for Auto Technology's courses, possibly due to the innovative sections that we run. Many sections are fundamentally different those found in most disciplines. Some examples are:

- Auto 99...Automotive Occupational Work Experience. *This is not a class that is taught by an instructor*. This is a supervised employment designed to provide on-the-job occupational education, but it shows up as having 20 "seats" (while the actual enrollment is only 1 to 3), and if it is factored in as a traditional class it will negatively impact our numbers.
- Auto 98...Independent Study in Auto Mechanics. *This is not a class that is taught by an instructor*. This is a supervised lab project designed to allow students to practice and enhance their mental and hands-on skill while earning three credits. It has a class limit of just five students, and, due to the low maximum section enrollment, if it is factored in as a traditional class it will negatively impact our numbers.
- Auto 80...Introduction to Automotive Technology. This is a traditional class and is suggested as the first class that our automotive students take. But we also offer this class in five or six nontraditional sections that offer students the opportunity to gain credit for this class through Credit By Exam. These are typically sections with an enrollment limit of 5, and, if they are factored in as traditional class sections, will drag our numbers down.
- Auto 194...This is a class that is co-listed as Det 194. One Automotive instructor is teaching the single section that we typically offer, but the Automotive Department receives credit for only the students who have enrolled through Auto, *not Det*. This will obviously skew our numbers negatively.
- Auto 190.1 and Auto 190.1L...These are skewing our numbers in the same manner as Auto 194. These sections are also co-listed as Det sections but are taught by one Automotive instructor.

The Automotive Technology Department is much more efficient and its section's are much more crowded than is suggested by this data. We have been overfilling our sections by 25% to 50% for the last three semesters in an attempt to offer training to the students who cannot find classes due to schedule reductions.

# Automotive Technology - FY 2017-18 (plus current FY Summer and Fall)

#### **5.2a Enrollment Efficiency** The percentage of seats filled in each Discipline at first census based on class limit (not room size).

Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2013
Automotive Technology	115.0%	112.4%	97.6%	95.0%	110.2%	91.4%	88.3%	93.0%	91.

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Automotive Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0

#### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Automotive Technology	0.0%	0.0%	15.0%	0.0%	0.0%	26.7%	0.0%	0.0%	0.0

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
Automotive Technology	115.0%	112.4%	77.2%	95.0%	110.2%	84.4%	88.3%	93.0%	81.8

## 5.2b Average Class Size

During the semesters spring 2007 through spring 2009 our class size ran from an average high of 18.9 to a low of 12.5. The average class size was fairly consistent until 2009/2010, and now we run **about** 24. The increase is due to an unprecedented number of students wishing to enroll, coupled with a lack of budget to offer more sections.

Our class size limit is generally 20 students due to the difficulty of safely condusting lab sessions that include students utilizing power equipment and hand tools.

# Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.2b** Average Class Size The average class size in each Discipline at first census (excludes cancelled classes).

Santa Rosa Campus

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	23.0	23.0	20.9	23.0	21.1	19.9	19.0	20.5	1

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

#### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S201'
Automotive Technology	0.0	0.0	1.0	0.0	0.0	2.0	0.0	0.0	

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	23.0	23.0	14.3	23.0	21.1	13.9	19.0	20.5	1

## 5.3 Instructional Productivity

Please note the schedule table below:

Our productivity ranged from 11.66 through 13.03 in the period spring 2007 through spring 2009. The fall 2009, spring 2010, and Fall 2010 data have increased steadily but this data may be misleading; please refer to the rationale noted in section 5.2a.

Our programs tend to lower class size than the district goal (generally a maximum of 20) due to safety issues in the lab environment. We recently hired (2009) a second full time faculty member for Auto/Alternative Fuels. The extra faculty member coupled with the surge in class size (caused by the economic downturn) will increase our productivity ratio.

As the data below illustrates, our productivity is now approximately 15 to 19, so we are very close to the district average (due to overloading our classes to try and meet student demands)..

Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2017-18 (plus current FY Summer and Fall)

**5.3 Instructional Productivity** The ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF) in each Discipline at first census.

Santa Rosa Campus

Automotive Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	8.91	64.86	60.75	7.65	59.54	56.49	7.13	48.15	55.8
	FTEF	0.66	4.42	4.42	0.66	4.16	4.54	0.68	3.97	4.5
	Ratio	13.44	14.67	13.74	11.54	14.33	12.45	10.43	12.14	12.3

Petaluma Campus (Includes Rohnert Park and Sonoma)

Automotive Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0

#### $\begin{tabular}{ll} Other \ Locations \ (Includes the PSTC, Windsor, and other locations) \end{tabular}$

Automotive Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	FTEF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0

Automotive Technology		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018
	FTES	8.91	64.86	60.75	7.65	59.54	56.49	7.13	48.15	55.8
	FTEF	0.66	4.42	4.42	0.66	4.16	4.54	0.68	3.97	4.5
	Ratio	13.44	14.67	13.74	11.54	14.33	12.45	10.43	12.14	12.3

## **5.4 Curriculum Currency**

All of our core courses are current, (except those going inactive or currently being revised to 100 level courses) and our SLOs have been written. Our SLOs are posted on the web.

One must be careful reading the following course currency listing data. Most courses have multiple versions listed, but only the most recent should be referenced. Also, several courses are only proposed.

DisciplineNbr						
	VersionNbr	TermCourseLastTaught	DateLastReview	CourseStatus	ApprovalStatus	Cred
AUTO 108		3 Fall 2014	4/20/2009	Changed Course	Approved	no
<b>AUTO 109</b>		5 Summer 2009	9/20/2010	Changed Course	Approved	no
AUTO 125		2 Fall 2014	9/20/2010	Changed Course	Approved	no
<b>AUTO 153</b>		1	12/8/2014	New Course (First Version)	Approved	no
AUTO 156		1	12/8/2014	New Course (First Version)	Approved	no
AUTO 190.1		2 Fall 2011	3/28/2011	Changed Course	Approved	no
AUTO 192		2 Fall 2007	9/27/2010	Changed Course	Approved	no
<b>AUTO 194</b>		1 Fall 2014	10/11/2010	New Course (First Version)	Approved	no
AUTO 195		1	9/20/2010	New Course (First Version)	Approved	no
<b>AUTO 196</b>		1	5/7/2012	New Course (First Version)	Approved	no
AUTO 51		6 Fall 2014	9/20/2010	Changed Course	Approved	no
AUTO 52		5 Fall 2014	9/20/2010	Changed Course	Approved	no
AUTO 53		6 Fall 2014	2/7/2011	Changed Course	Approved	no
AUTO 54		6 Fall 2014	2/1/2010	Changed Course	Approved	no
AUTO 56		6 Fall 2014	5/12/2008	Changed Course	Approved	no
AUTO 80		1 Fall 2014	1/27/2014	New Course (First Version)	Approved	yes
AUTO 98		5 Spring 2014	1/23/2012	Changed Course	Approved	no
AUTO 99		4 Fall 2014	5/11/2009	Changed Course	Approved	no
AUTO190.1L		2 Spring 2011	9/27/2010	Changed Course	Approved	no

## 5.5 Successful Program Completion

We always encourage our students to earn an Associate's Degree with a major in Automotive Technology, but if they do not, or can not, accomplish the AA degree we advise them to complete the Automotive program to earn a full Automotive Certificate. In either case we hand out the proper forms near semester end, and explain to them the reasons that they should apply for their certificates, such as improving their employment opportunities.

We award between 8 and 30 full Automotive certificates a year. This number would improve if A & R automatically awarded them, because many students do not complete the paperwork needed to receive their certificates. Our full Automotive certificate numbers have dropped since we started issuing specialty area certificates. We encourage all students to pursue an A.S. or a full Automotive certificate, and to apply for their ASE and Smog licenses.

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We have been over the district total% for retention in each of the last three full semesters. Automotive Technology - Automotive Technology - FY 2013-14 (plus current FY Summer and Fall)

**5.6a Retention** The percentage of students receiving a grade of A,B,C,D,CR, or I in each Discipline (duplicated headcount).

#### Santa Rosa Campus

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	78.0%	75.1%	74.7%	93.3%	82.0%	81.9%	85.0%	74.8%	81.39

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.09

#### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.09

#### **ALL Locations** (Combined totals from ALL locations in the District)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	78.0%	75.1%	74.9%	93.3%	82.0%	83.0%	85.0%	74.8%	82.09

# Automotive Technology - FY 2013-14 (plus current FY Summer and Fall)

**5.6b Successful Course Completion** The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

#### Santa Rosa Campus

Sunta Hosa Campus									
Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	73.2%	69.6%	66.4%	93.3%	72.3%	77.1%	85.0%	67.3%	69.09

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.09

#### Other Locations (Includes the PSTC, Windsor, and other locations)

,			,						
Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.09

#### **ALL Locations** (Combined totals from ALL locations in the District)

Discipline	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013	S2014
Automotive Technology	73.2%	69.6%	66.7%	93.3%	72.3%	78.5%	85.0%	67.3%	70.29

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# Automotive Technology -

#### Latest certificate data:

Cert	TOP	Description	Prog	2002	2003	2004	2005	2006	2007
Code			Awrd	2003	2004	2005	2006	2007	2008
1039	094800	Automotive Technology	A	0	0	0	0	1	5
3032	094800	Automotive Technology	Т	12	38	13	16	14	9
3298	094800	Automotive Technology: Brakes, Steering and	E	2	1	0	14	12	7
3299	094800	Automotive Technology: Engine Repair Special	E	2	0	1	5	18	14
3300	094800	Automotive Technology: Transmission Speciali	E	2	0	1	5	21	15
3301	094800	Automotive Technology: Tune-Up and Electroni	E	0	0	0	0	2	4
5054	094800	Automotive Technology: Electric and Electron	0	2	0	0	42	49	36
5055	094800	Automotive Technology: Heating and Air Condi	0	0	0	0	0	15	13

#### 5.6 Student Success

Our retention rates have been climbing due to the competitive job market which has made additional skill training an edge in getting hired.

# Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.6a Retention** The percentage of students receiving a grade of A,B,C,D,CR, or I in each Discipline (duplicated headcount).

#### Santa Rosa Campus

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	88.9%	79.3%	78.6%	83.8%	88.8%	84.7%	71.9%	81.6%	80.3

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0

#### Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0

#### $ALL \ Locations \ \ ({\sf Combined \ totals \ from \ ALL \ locations \ in \ the \ District})$

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	6201
Discipline	A2014	F 2014	52015	A2015	F2015	52010	A2010	F 2010	5201
Automotive Technology	88.9%	79.3%	79.1%	83.8%	88.8%	85.4%	71.9%	81.6%	81.0

# Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.6b Successful Course Completion** The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

Santa Rosa Campus

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S201
Automotive Technology	88.9%	71.1%	72.8%	82.4%	81.9%	80.2%	61.4%	77.4%	74.

Petaluma Campus (Includes Rohnert Park and Sonoma)

		,							
Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	88.9%	71.1%	73.4%	82.4%	81.9%	81.2%	61.4%	77.4%	75.

# Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.6c Grade Point Average** The average GPA in each Discipline (UnitsTotal / GradePoints).

**Santa Rosa Campus** 

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S201'
Automotive Technology	2.90	2.45	2.92	2.99	2.69	2.64	2.27	2.45	2

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

#### Other Locations (Includes the PSTC, Windsor, and other locations)

 	,								
Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	0.00	0.00	2.33	0.00	0.00	3.00	0.00	0.00	2

Discipline	X2014	F2014	S2015	X2015	F2015	S2016	X2016	F2016	S2017
Automotive Technology	2.90	2.45	2.91	2.99	2.69	2.65	2.27	2.45	2.

#### 5.7 Student Access

Our Automotive Department programs are very diverse ethnically, and closely reflect the area population.

Our trade education is attractive to non-academic college students, in that it offers good earning potential for those not inclined to pursue an academic degree program. We are not balanced in male/female ratio to the local population. Our classes are approximately 95% male in composition. We probably never will be well balanced, but we do encourage every female student that enters our program. We have begun accelerated outreach to the local high schools, and we will include outreach to the nontraditional automotive student. In the automotive department we consider nontraditional to be female.

Our age percentages are heavily biased to students who are thirty years of age or younger (78%), but we have students in the over sixty-one group also.

## <u>Please see the tables below for statistical data concerning the</u> Automotive Department:

Santa Rosa Junior College - Program Unit Review Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.7a Students Served - by Ethnicity** The number of students in each Discipline at first census broken down by ethnicity (duplicated headcount).

A	I	T,	T	ocations	(Combined totals from ALL locations in the District)	
		$\sim$	_	weattons	COMBINED DIAIS HOM ALL JOCAHOUS III HE DISHICH	

Automotive Technology	Ethnicity	2014-15	Percent	2015-16	Percent	2016-17	Percent	- 2
	White	200	38.8%	212	38.7%	156	32.6%	ĺ
	Asian	21	4.1%	13	2.4%	23	4.8%	
	Black	20	3.9%	20	3.6%	9	1.9%	
	Hispanic	240	46.6%	269	49.1%	265	55.4%	
	Native American	11	2.1%	4	0.7%	0	0.0%	ĺ
	Pacific Islander	0	0.0%	0	0.0%	0	0.0%	ĺ
	Filipino	1	0.2%	4	0.7%	1	0.2%	
	Other Non-White	22	4.3%	19	3.5%	12	2.5%	
	Decline to state	0	0.0%	7	1.3%	12	2.5%	
	ALL Ethnicities	515	100.0%	548	100.0%	478	100.0%	

Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.7b** Students Served - by Gender The number of students in each Discipline at first census broken down by gender (duplicated headcount).

Automotive Technology	Gender	2014-15	Percent	2015-16	Percent	2016-17	Percent	2
	Male	479	93.0%	513	93.6%	449	93.9%	
	Female	35	6.8%	27	4.9%	24	5.0%	
	Unknown	1	0.2%	8	1.5%	5	1.0%	
	ALL Genders	515	100.0%	548	100.0%	478	100.0%	

# Automotive Technology - FY 2016-17 (plus current FY Summer and Fall)

**5.7c Students Served - by Age** The number of students in each Discipline at first census broken down by age (duplicated headcount).

**ALL Locations** (Combined totals from ALL locations in the District)

Automotive Technology	Age Range	2014-15	Percent	2015-16	Percent	2016-17	Percent	- 2
	0 thru 18	79	15.3%	100	18.2%	89	18.6%	
	19 and 20	152	29.5%	192	35.0%	167	34.9%	
	21 thru 25	150	29.1%	131	23.9%	141	29.5%	
	26 thru 30	60	11.7%	58	10.6%	34	7.1%	
	31 thru 35	29	5.6%	34	6.2%	23	4.8%	
	36 thru 40	10	1.9%	16	2.9%	8	1.7%	
	41 thru 45	15	2.9%	4	0.7%	6	1.3%	
	46 thru 50	11	2.1%	9	1.6%	4	0.8%	
	51 thru 60	8	1.6%	3	0.5%	6	1.3%	
	61 plus	1	0.2%	1	0.2%	0	0.0%	
	ALL Ages	515	100.0%	548	100.0%	478	100.0%	

#### 5.8 Curriculum Offered Within Reasonable Time Frame

Our core progams are offered every semester, as are several automotive certificate electives. Several electives have been put into an alternating semester schedule due to reductions in FTEF.

Students seeking a certficate or degree in Automotive Technology can accomplish this within two years,

even with the recent scheduling cutbacks.

## 5.9a Curriculum Responsiveness

Our Automotive Department advisory committee has excellent attendance from industry. These members come from local dealerships, local independent repair shops, local body repair shops and automotive tool sales companies. Only one of these industry people also serves as a

member of our adjunct faculty. We also have great attendance by SRJC faculty and staff, local high schools, and outside organizations of various kinds.

Our Automotive Department advisory committee reviewed our curriculum at its Spring 2014 meeting, and gave us feedback. As a result of the feedback we are working on obtaining better training vehicles and equipment to support our lab sections, and we are deactivating some classes while adding to our Alternative Fuels program (hybrid vehicle training, first responder training). They also strongly voiced their opinion that we need to replace our wheel/tire and alignment equipment.

## 5.9b Alignment with High Schools (Tech-Prep ONLY)

We are deeply involved with local high schools and work extensively with the "Manager of School Initiatives and Career Pathway Development" and her department. We have been involved with 2+2 in past years, and now have developed a process that allows local high school auto instructors to administer the SRJC CBE (Credit By Exam) test for our Auto 100 Intro to Automotive Technology class. This allows high school students to enter our SRJC automotive program with advanced standing.

The Industrial Trade Technology courses currently offered through this high school CBE program are:

Auto 80...Intro to Automotive Technology Det 80...Diesel Shop Practices Det 81...Preventive Maintenance and Inspection

# 5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

The automotive program core courses are transferrable to California CSU schools but not UC schools.

# **5.11a Labor Market Demand (Occupational Programs ONLY)**

Feedback from the Automotive Advisory Committee about business and labor expansion is strong.

Things in the auto service and sales sectors are also strong.

News from both automobile manufacturers and aftermarket service segments lament the shortage of qualified candidates to work in both technical and support staff positions.

In the North Bay area, College of Marin offers automotive classes and further north, Mendocino College offers an automotive program.

#### This is the 2008-2018 nine Bay Area county statistical projection found on the EDD website:

	2008-2018 Occupational Employment Projections Napa Metropolitan Statistical Area (Napa County)  SOC Code Occupational Title Annual Average Employment Change Average Annual									
SOC Code Occupational Title		Annual A	_	Employme	ent Change	Average Annual Job Openings				
		2008	2018	Numerical [1]	Percent	New Jobs [2]	Replace- ment Needs [3]	Total Job [4]		
49-3023	Automotive Service Technicians and Mechanics	290	330	40	13.8	5	6			

# 2008-2018 Occupational Employment Projections

San Francisco-San Mateo-Redwood City Metropolitan Division

(Marin, San Francisco, and San Mateo Counties)

, , , , , , , , , , , , , , , , , , , ,										
SOC Code	Occupational Title	Annual Average Employment		Employme	ent Change	Average Annual Job Openings				
		2008	2018	Numerical [1]	Percent	New Jobs [2]	Replace- ment Needs [3]	Total Job [4]		
49-3011	Aircraft Mechanics and Service Technicians	2,280	2,140	-140	-6.1	0	44			

# 2008-2018 Occupational Employment Projections Santa Rosa-Petaluma Metropolitan Statistical Area (Sonoma County) Code Occupational Title Annual Average

SOC Code	Occupational Title	Annual Average Employment	Employment Change	Average Annual Job Openings	

		2008	2018	Numerical [1]	Percent	New Jobs [2]	Replace- ment Needs [3]	Total Job [4]
49-3023	Automotive Service Technicians and Mechanics	1,200	1,240	40	3.3	3	23	
	3-2018 Occupational Employ Projections Oakland-Fremont-Hayward meda and Contra Costa Cour	Metropolit	an Divisio	n				
SOC Code	Occupational Title	Annual Average Employment		Employment Change		Average Annual Job Openings		
		2008	2018	Numerical [1]	Percent	New Jobs [2]	Replace- ment Needs [3]	Total Jo
49-3021	Automotive Body and Related Repairers	1,070	980	-90	-8.4	0	28	
	3-2018 Occupational Employ Projections San Jose-Sunnyvale-Santa Cla ta Clara and San Benito Cou	ara Metrop	oolitan Sta	tistical Are	a			
SOC Code	Occupational Title	Annual A	_	Employment Change		Average Annual Job Openings		
		2008	2018	Numerical [1]	Percent	New Jobs [2]	Replace- ment Needs [3]	Total Jo [4]

#### 5.11b Academic Standards

Technicians

Aircraft Mechanics and Service

49-3011

The Automotive program discusses academic standards at our department meetings. We have recently been dealing with content standards while reviewing course outlines to establish SLOs. Employers expect that our students meet some type of industry performance standard, and we discuss these standards with our advisory committee. Often we use the ability to pass national,

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independent, industry accepted skill level tests as a standard. We also use acceptable work ski demonstrations as a standard.	11

# **6.1 Progress and Accomplishments Since Last Program/Unit Review**

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	Santa Rosa	02	01	Maitain NATEF (now ASEEF) Certification for the Automotive program	Complete self evaluation     Implement necessary changes     Have an official inspection team visit and evaluate our program	Recert due: 2021.	1500 - 2000 man hours \$1000 - \$5000 in funds
0002	Santa Rosa	01	01	Replace outdated & worn auto shop equipment with new.	Replace listed equipment and tools (available in I&TT office)	summer 2020	\$200,000.00
0003	Santa Rosa	02	01	Certify automotive instructors to certify students in the theory and use of Snap-On scantools, torque measuring tools, multimeters, and precision measuring tools. Certification to be issued by NC3, a national organization.	Take advantage of online "Train the Trainer" courses being offered by NC3.	summer 2020	\$10,000

# 6.2b PRPP Editor Feedback - Optional

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## 6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	Santa Rosa	02	01	Maitain NATEF (now ASEEF) Certification for the Automotive program	Complete self evaluation     Implement necessary changes     Have an official inspection team visit and evaluate our program	Recert due: 2021.	1500 - 2000 man hours \$1000 - \$5000 in funds
0002	Santa Rosa	01	01	Replace outdated & worn auto shop equipment with new.	Replace listed equipment and tools (available in I&TT office)	summer 2020	\$200,000.00
0003	Santa Rosa	02	01	Certify automotive instructors to certify students in the theory and use of Snap-On scantools, torque measuring tools, multimeters, and precision measuring tools. Certification to be issued by NC3, a national organization.	Take advantage of online "Train the Trainer" courses being offered by NC3.	summer 2020	\$10,000