

Saddleback College Program Review for Facilities, Maintenance and Transportation



Submitted Fall 2008

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Program Review Team Members and Approvals

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Approvals:

Facilities, Maintenance & Operations Department Director

Program Review Chair

Academic or Classified Senate President

Vice President of Instruction or Student Services

Program Review Checklist

Date Completed	Action
02-14-2008	Contact Program Review Chair for orientation
02-14-2008	Form Program Review Team
02-21-2008	Gather documents (Org Chart/Staffing Profile/AUO Assessment Forms)
03-18-2008	Solicit input from faculty and students
05-30-2008	Determine if additional research is needed
02-14-2008	Contact College Research Analyst if necessary
04-18-2008	Write Program Review report
08-22-2008	Submit report to Dean or VP and Program Review Chair for approval
	Report submitted to Academic or Classified Senate for approval
	Report submitted to Office of Instruction or Student Services for approval
	Report submitted to College President and the Office of Institutional Effectiveness
	Report posted to the IE web site
	Presentation to the Planning and Budget Committee

Executive Summary

Facilities, Maintenance & Transportation is one part of the larger Facilities, Maintenance & Operations Department which supports approximately 23,000¹ students by providing services to the 500 Saddleback College administrators, faculty and staff as well as the 100 South Orange County Community College District personnel on the 214 acres of the picturesque rolling hills that are Saddleback College and its 51 buildings and structures.²

Just in the calendar year 2006 alone, The Facilities, Maintenance & Transportation group resolved a total of 8,953³ work orders of the Facilities, Maintenance & Operations Departments: 12,563 total work orders for the repair and maintenance of the campus-wide buildings as well as the HVAC Equipment and Systems, Electrical Systems and Switch Gear, Campus-wide Plumbing, Pool & Fountain areas; Irrigation (both potable and reclaimed); the Transportation Department's maintenance of the campus and district vehicles; plus all the other motorized equipment on campus such as mowers, generators, forklifts and chain saws, just to name a few.

The high level of customer service provided by the team members of the Facilities, Maintenance & Transportation group is a result of the M&O staff's commitment to excellence.

The purpose of this study was to evaluate the services provided by the Facilities, Maintenance & Transportation group to Saddleback College students, faculty and staff.

Overview of program review process used

The program review included several steps. First, we reviewed the mission statement of the department to make sure that it aligned well with the mission statement of the college. In the second step, the staff of the Maintenance & Transportation group reviewed goals and objectives of the group to make sure that they reflected the activities performed by the group and were aligned with the goals and objectives of the of the Facilities, Maintenance & Operations Department and Saddleback College.

Third, a list of strengths and weaknesses were developed. These were used to identify individual group strengths and weaknesses and will be used in evaluations to improve overall performance.

Findings - Program Strengths

The strengths of this group include knowledgeable, mature team members who are experts at doing more with less. The task of maintaining a 40 year old community college campus like Saddleback College is a daunting one, so it is important to recognize the talented staff that works independently, and in teams, as needed to

complete the many diverse tasks assigned to them on a daily basis. We also possess an intimate knowledge of the history for each Saddleback College building and its infrastructure. This enables us to provide the necessary level of services to maintain Saddleback College to ensure that its students, faculty, staff and community are able to continue to learn in today's fast-paced environment.

Findings – Program Weaknesses/Areas of Improvement

The general staff and faculty remain mostly unaware of the scope and breadth of work performed by the Facilities, Maintenance & Transportation group, even when they have requested work to be done and have benefited from our services.

Current staffing is insufficient to provide full weekend coverage, or the implementation of a comprehensive Preventative Maintenance program. This is now handled on an overtime or emergency call-in basis and continues to have a negative impact to our overall morale.

Section I: Unit Overview

A. The Mission of the Unit and its Link to the College's Mission and Goals

Our Vision:

To inspire and develop through excellence in education, a community of diverse learners dedicated to achieving their full potential in our global society.

Our Mission:

The mission of Saddleback College's Facilities, Maintenance & Transportation group links directly to both the mission of our parent department; Facilities, Maintenance & Operations, as well as Saddleback College's mission and goals. The mission of the Facilities, Maintenance & Transportation group is to provide transportation and safe access to comfortable, well-lit classrooms and study halls, in an effort to support learning opportunities that promote student success; to foster intellectual growth, individual expression, and character development; and to support a dynamic and diverse environment of innovation and collegiality.

Our Goal:

The primary goal of Saddleback College's Facilities, Maintenance & Transportation group is to provide safe user-friendly transportation, facilities and access to facilities to the students, faculty, staff and community of Saddleback College. This is done in an effort to support the college's goal of providing comprehensive post-secondary education and a full range of student services. To this end, the Facilities, Maintenance & Transportation group provides the following services:

1. Communicates and meets with student groups, instructors, college and district administrators to support the college's goal of providing comprehensive post-secondary education
2. Responds immediately, or as soon as possible, to all requests for service, 7 days a week, 24 hours a day
3. Plans, organizes, coordinates and manages maintenance, construction and energy management projects throughout the campus
4. Manages new construction and retrofit projects on campus from vision through completion, as well as the monitoring and oversight of work in progress
5. Works with construction contractors and architects to coordinate facilities remodeling, renovation and/or new construction
6. Develops, manages and evaluates the use of energy-saving resources on campus
7. Prepares recommendations and justifications regarding budget requests.
8. Manages expenditures according to district policies and applicable regulations
9. Mentors, trains, supervises and evaluates the performance of journey-level maintenance teams including HVAC, electrical, transportation, plumbing, irrigation and pool maintenance personnel
10. Coordinates department activities with other district and campus functions
11. Serves on campus and district committees, task forces and other work groups
12. Provides technical expertise concerning facilities maintenance, construction and energy management.

B. Historical Background and Unique Characteristics of the Unit

Background:

The Facilities, Maintenance & Operations Department has been a part of Saddleback College since shortly after the college's opening in 1968⁴. Over the years, there have been many changes, not just in the size of the college and the technologies used to support it, but also in the maintenance staffing levels used in supporting the college. Saddleback College has grown from 10 buildings and a few thousand square feet of classroom space, to approximately 51 buildings and structures with well over 720,000 square feet, on 214 acres of hillside land. Unfortunately, the Facilities, Maintenance & Transportation group has not grown at the same pace as the college, and in fact, it has been reduced in size over the years with the elimination of some positions. For example, in transportation we had a full-time equipment operator that we no longer have. As recently as 2002 we had three full-time electricians; now we have only two. In 1998 we had four full-time HVAC technicians, and now we have only three.

Unique Characteristics:

The Facilities, Maintenance & Transportation group is a very lean group which consists of a total of 18 very industrious individuals: 16 full-time Saddleback College employees, one full-time subcontract consultant to maintain the cogeneration plant, and one full-time consultant as a project inspector.

The Facilities, Maintenance & Transportation group manages the electricity on campus including the electricity produced from our cogeneration plant, centrally located on campus at our central plant building. This building also houses campus-wide boilers and chillers which produce all the hot and cold water necessary to heat and cool the entire campus, as well as to campus offices.

Our hours of operation are Monday through Friday, 6:00 a.m. to 5:00 p.m. During these hours, our group responds to a variety of maintenance requests and completes various preventative maintenance tasks. We do all this while responding to emergency service calls throughout the campus on a daily basis. We also test, maintain and service seven full-time stand-by generators for critical power in the event of an emergency when normal power is unavailable.

All of our 18 team members are expected to respond as needed seven days a week, 24 hours a day, to any emergency maintenance issues arising during off hours, including holidays. The majority of the staff continues to demonstrate a strong commitment to Saddleback College and its infrastructure, and do what they can to fulfill our commitment to keep the college's equipment running and in good working order 365 days a year. This can sometimes be a challenge given the leanness of our group.

The Facilities, Maintenance & Transportation group office is centrally located on campus, in the central plant building. The transportation office and work areas are located in the modular building known as the "T" building. The "T" building is one of the original buildings on campus and was home to the original auto shop classes before the construction of the ATAS building. As such, its vintage and is between 30 to 40 years old. The attached yard is used to store the instructional use vehicles, as well as our campus fueling station.

C. Progress Since the Last Program Review

This is the first program review that the Facilities, Maintenance & Transportation group have completed, so we have no baseline from which to evaluate progress. This document will serve as our baseline review in the future.

D. Current Strengths, Opportunities, and Challenges

Strengths:

One of our greatest strengths is our ability to retain valuable employees. The majority of the employees on our team have over five years of service with Saddleback College. These people are extremely motivated and continue to work hard at getting the job done. These individuals have made their work of such value that the employees with fewer years of service must maintain a strong work ethic to keep up. This, paired with their commitment to the college, is what makes our employees the cornerstone of our team. Many go the extra mile in completing their work assignments to ensure the work gets done on time and correctly. These same employees will work on weekends, holidays and even Christmas break, when asked to complete special projects.

Another key strength is the unwavering support provided from our department head. The Director of the Maintenance & Operations Department is very supportive and continually provides the necessary direction and equipment to help us achieve our department's goals, as well as our personal goals.

Opportunities:

There is always room for improvement and the Facilities, Maintenance & Transportation group is no exception. The faculty and staff often have their first impression of our group when problems arise. It is, therefore, of the utmost importance that the group as a whole provides the best impression possible. This can be achieved by maintaining a helpful attitude and addressing issues as quickly as possible.

The Facilities, Maintenance & Transportation group has in the past conducted informal surveys of various faculty and staff to determine their satisfaction with the level of services provided; this in an effort to ensure continued success in meeting our goals and to better evaluate our strengths and weaknesses. To better document and track our successes, the Facilities, Maintenance & Transportation group will begin providing customer satisfaction survey forms in the vehicle information packages for each of the instructional vehicles checked out over the next year. See attachment "A" for survey results.

Challenges:

The college keeps growing in size and program offerings; however, the number of maintenance personnel required to perform the maintenance of the campus has not kept pace with that growth. A big challenge for this group is to add additional positions to complete the current department workload. Due to a lack of staffing, weekend coverage is currently nonexistent, except for emergency call-ins. The additional staffing needs should be evaluated and planned to improve the overall

services provided by our group. With the quantity of activities occurring on any given weekend (student testing, local community events, theatre performances, sporting events/activities, vehicle check in/out and outside cultural events), it is important to have staff on hand who can address the campus and community needs as they arise.

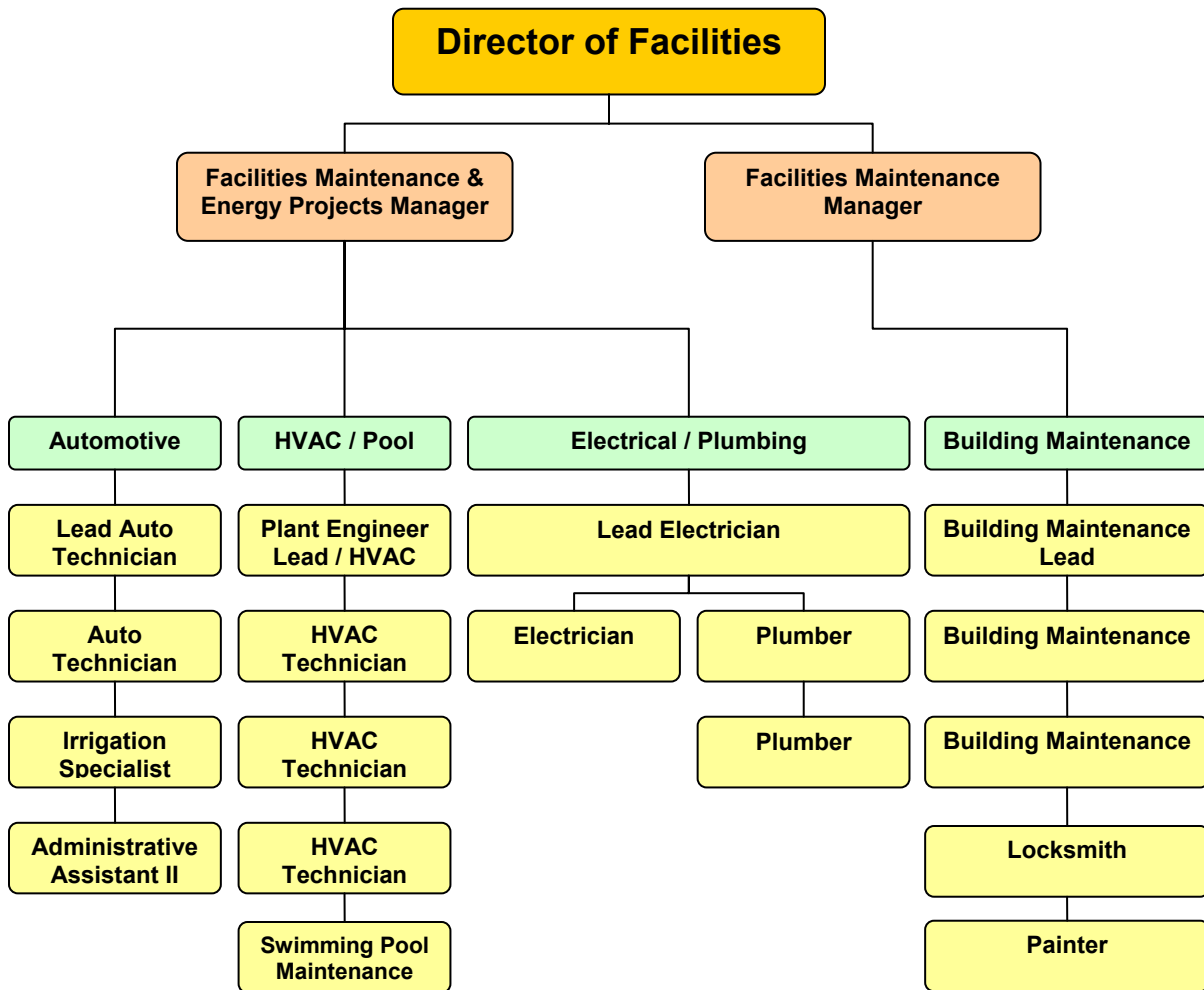
Section II: Review Report

A. Staffing and Organizational Structure

Staffing:

The staffing structure for the Facilities, Maintenance & Transportation group includes two full-time manager and 18 full-time employees and subcontractors. The current staffing levels are inadequate to support our current and future growth needs and still meet our mission goals.

Organizational Structure:



In an effort to meet the needs of the college operations, we propose an increase to this year's staffing levels as follows:

1. One additional full-time electrician
2. One full-time lead plumber
3. One additional full-time HVAC technician
4. One additional full-time building maintenance worker
5. One additional full-time auto equipment technician
6. One additional full-time irrigation specialist
7. One full-time equipment operator

B. Programs and Services

Services provided by the Facilities, Maintenance & Transportation group are varied and range from administrative support to pool maintenance. The following is a brief example of the services provided:

1. TRANSPORTATION

- a. Transportation Administrative Assistant
 - i. Serve as the liaison between the Transportation group and the campus.
 - ii. Maintain the confidential DMV records for all approved Saddleback College and District drivers.
 - iii. Respond to and coordinated all requests for vehicles on campus and rent vehicles when necessary.
 - iv. Track fuel consumption and manage fuel orders to avoid fuel shortages on campus.
 - v. Support the maintenance department's senior administrator as follows:
 - a. Complete meeting reports
 - b. Develop schedules related to activities and services
 - c. Review, update, and inform the senior administrator and others of essential timelines
 - d. Coordinate the flow of activities through the office in relation to priorities and schedules
 - e. Assure the timely completion of work in accordance with established policies, procedures, and standards
- b. Transportation Automotive Technician
 - i. Inspect, diagnose, and determine mechanical and electronic problems on Saddleback College and District automobiles, trucks, and a variety of diesel- and gasoline-powered maintenance equipment and grounds equipment.

- ii. Replace or repair faulty parts including wheel bearings, clutches, oil seals, shock absorbers, exhaust systems, steering mechanisms, and related parts and equipment
- iii. Service, overhaul, repair, and adjust engines, transmissions, differentials, and clutches, tune up engines
- iv. Replace ignition parts
- v. Clean and adjust carburetors;
- vi. Diagnose and repair automotive electrical, air conditioning and climate control systems, braking systems including disc, hydraulic, and air brakes, generators, distributors, relays, lights and switches
- vii. Diagnose and repair computerized control systems
- viii. Weld, fabricate and assemble parts and equipment for automotive and heavy equipment
- ix. Perform oxygen, heliarc and acetylene gas welding and brazing as needed on campus
- x. Assist in the timely purchase of parts and materials used for repair and maintenance
- xi. Maintain files of equipment catalogs, service and parts manuals; and maintains work, time, and material records.

2. ELECTRICIAN

- a. Install, maintain and repair a variety of electrical equipment and controls including interior and exterior electrical lighting circuits, conduit and duct systems, transformers and other types of electrical power equipment.
- b. Install and maintain automated systems including parking lot lights, emergency light and computerized fire and alarm systems.
- c. Troubleshoot and repair short circuits, power failures and other electrical problems; test, locate and repair damaged electrical circuitry.
- d. Repair and replace defective or worn electrical parts in motors, generators, pumps, telemetry equipment, controllers, switches and other facilities and equipment.
- e. Inspect newly-installed electrical equipment and lighting to ensure safe and satisfactory functioning.
- f. Perform predictive, preventative, and corrective maintenance on equipment

ELECTRICIAN (Continued)

- g. Inspect, clean, disconnect, improve, and reenergize high voltage networks as necessary.
- h. Install low-voltage fiber optic cable for networking purposes as required; inspect, correct and modify cable as needed.
- i. Respond to electrical calls and emergencies as necessary.
- j. Operate and maintain a variety of hand tools, power tools, pneumatic tools, trucks and other equipment in the performance of assigned duties.
- k. Prepare and maintain a variety of written records and reports; read and interpret electrical and mechanical drawings and specifications.

3. HVAC TECHNICIAN

- a. Inspect, test, troubleshoot, repair, maintain and service all types of heating, refrigeration, ventilation and air conditioning equipment and systems; ensure proper functioning; repair leaks and malfunctioning dampers in systems.
- b. Install, replace, repair and adjust valves, thermostats, fans, pressure and air regulators, filters, belts, fuses, controls, gauges, air compressors, blowers, dryers and pumps; test joints and insulate pipes of refrigeration and air conditioning systems; clean, lubricate and adjust systems as required.
- c. Test water used in air conditioning systems for proper levels of chemical treatment; maintain appropriate levels to maximize corrosion protection in cooling towers and water supply.
- d. Fabricate, repair and install duct work and chassis covers; cut threads and assemble pipe and tubing to other components of air conditioning, heating and refrigeration equipment.
- e. Perform inspections of powerhouses throughout the assigned campus; monitor operation of mechanical systems that supply air conditioning to buildings.

HVAC TECHNICIAN (Continued)

- f. Perform scheduled preventative maintenance on all air conditioning and related equipment.
- g. As assigned, assists in operating the Energy Management System in order to control time schedule and temperature of conditioned areas on campus.
- h. As assigned, assist outside contractors; provide information within the area of assignment; provide hands-on assistance as necessary.
- i. Order, stock and maintain equipment and supplies.
- j. Provide assistance on various other maintenance and repair projects as assigned.

4. IRRIGATION SYSTEMS SPECIALIST

- a. Develop, install, repair and maintain the college's reclaimed water system; repair mainline, lateral, and component pipe breaks; maintain current knowledge of local water district requirements and state regulations as well as health and safety issues concerning the use of reclaimed water; respond to violation notices and perform necessary corrections.
- b. Map and record reclaimed water system components and locations; develop and maintain current and accurate records of water systems alterations, reconstruction and new installations.
- c. Perform cross-connection testing for potable and reclaimed water systems and equipment to ensure there is no cross-contamination; ensure proper adjustment of all rotors, heads and related parts to avoid contamination of reclaimed water.
- d. Regulate and monitor water pressure to avoid pipeline breakage; determine whether water leaks are of potable or reclaimed water origin.
- e. Install, repair and replace landscape irrigation systems following blueprints, sketches or verbal instructions; install, adjust, maintain and repair electronic timers; test and repair back-flow devices.

IRRIGATION SYSTEMS SPECIALIST (Continued)

- f. Install, inspect and perform major repairs to electronic and hydraulic valves and controllers; install and maintain water shut off valves; rebuild components as necessary.
- g. Coordinate and oversee the installation and repair of water sewer lines; assist contractors with location of water and sewer lines.
- h. Replace and repair sprinkler heads and lines by removing, disassembling and replacing worn or broken parts; perform plumbing duties as required; order irrigation parts and supplies as necessary.
- i. Design complete irrigation systems, specifying optimum pounds per square inch (PSI), gallon per minute (GPM), mainline, laterals, controller, and heads in accordance with Moulton Niguel Water District and industry standards; tailor systems to plant material requirements as per landscape architectural standards.
- j. Operate construction equipment such as dump trucks, trenchers, backhoes and power tools including compressors and jackhammers; utilize test equipment to monitor water quality.
- k. Utilize proper safety precautions related to all work performed.

5. PLANT ENGINEER

- a. Lead, plan, train, and review the work of staff responsible for performing skilled work in the installation, servicing, repair, and maintenance of refrigeration, heating, ventilation and air conditioning equipment and systems; perform the most complex work of the unit including assigning, prioritizing, coordinating HVAC maintenance and repair work; ensure proper maintenance of all central plant systems.
- b. Train assigned employees in their areas of work including proper HVAC repair and maintenance methods, procedures, and techniques.
- c. Supervise the use, care and operation of a variety of HVAC repair equipment including electrical meters, air measuring devices, power hand tools, and piping tools.
- d. Verify the work of assigned employees for accuracy, proper work methods, techniques, and compliance with applicable standards and specifications; ensure adherence to safe work practices and procedures.

PLANT ENGINEER (Continued)

- e. Maintain, troubleshoot, repair, and install controls for energy management network; operate energy management computer system; program operation of heating, ventilation and air conditioning systems to coincide with facility utilization.
- f. Install, troubleshoot, maintain and repair a variety of plant systems including boilers, chillers, cooling towers, refrigeration systems, ventilation systems, and air conditioning units.
- g. Install, replace, repair and adjust valves, thermostats, fans, pressure and air regulators, filters, belts, fuses, controls, gauges, air compressors, blowers, dryers and pumps; test joints and insulate pipes of refrigeration and air conditioning systems; clean, lubricate and adjust systems as required.
- h. Write, test, and install programs using accepted strategies to operate HVAC systems on campus; operate and schedule HVAC systems using campus energy management network.
- i. Perform scheduled preventative maintenance on all air conditioning and related equipment.
- j. Maintain and repair sewer, gas and water lines; treat and maintain water systems to control scale, corrosion and bacteria.
- k. Calibrate, maintain and repair pneumatic and electrical thermostats and controls; maintain and repair computer alarm control systems and components.
- l. Assist outside contractors; provide information within the area of assignment; provide hands on assistance as necessary; inspect completed work and report punch-list items to supervisor.
- m. Maintain logs and reports pertaining to scheduled maintenance and repair; prepare reports as necessary.
- n. Order, stock, and inventory HVAC and related repair parts and supplies.
- o. May provide lead supervision to other maintenance and operations personnel as assigned.

6. PLUMBER

- a. Perform a variety of skilled plumbing tasks; troubleshoot malfunctions and identify plan of action to resolve problems.
- b. Maintain, replace and repair toilets, urinals, sinks, showers and other bathroom fixtures; install, maintain and repair a variety of valves, controllers, faucets and shut off valves; repair, replace, troubleshoot, and maintain manually- and electronically-activated faucets, flushometers and fittings.
- c. Repair and maintain free-standing and flush-mounted drinking fountains, water coolers and electric and gas water heaters and related piping.
- d. Assemble copper, brass, cast iron, steel, ABS, PVC, aluminum, stainless steel and glass pipes and fittings.
- e. Maintain and repair fire sprinklers, hydrants and hose stations; repair or replace gas meters, pressure regulators and safety valves.
- f. Repair or rebuild emergency showers and eyewash stations.
- g. Maintain, test, adjust and record water treatment towers and boilers, electronic timers and back flow devices.
- h. Maintain and repair air, gas, water, waste and steam lines; assist contractors in locating various piping systems and valves as necessary.
- i. Operate construction equipment such as dump trucks, trenchers and backhoes, and power tools such as compressors and jackhammers; excavate and backfill trenches, ditches, and holes as necessary.
- j. Maintain and unclog storm drains and sewer lines.
- k. Estimate time, material, and labor costs for maintenance and repair projects; purchase supplies and materials as needed.
- l. Perform preventative maintenance and inspection of piping systems and related equipment and devices.

7. SWIMMING POOL MAINTENANCE WORKER

- a. Brush and vacuum pool; clean and back wash filters and lines; clean tile and wash down pool decks and walks; drain and acid wash pool.
- b. Conduct chemical tests of water and apply chemicals as needed; clean and refill chlorine bins; make chemical adjustments to obtain proper chemical readings.
- c. Perform minor repairs to swimming pool and equipment including underwater repairs and servicing; may assist maintenance staff in performing major repairs to equipment.
- d. Maintain pool maintenance records and cleaning schedules; maintain inventory, and requisition supplies and equipment related to pool use; properly dispose of hazardous chemicals.
- e. Maintain communication with appropriate staff, coaches and outside pool users to determine and properly schedule routine swimming pool maintenance and repair activities.
- f. Secure pool property and equipment; assist in vandalism prevention and reporting.
- g. Chemically treat and maintain the college fountain.
- h. Ensure a safe work environment is maintained; visually check and manual test all emergency eye wash and shower units on campus.
- i. Operate a variety of equipment and hand and small power tools; ensure all equipment is operated in a safe and efficient manner.
- j. Assist other maintenance staff in performing assigned duties as necessary.

8. BUILDING MAINTENANCE WORKER

- a. Perform a variety of semi-skilled maintenance and repair duties on campus structures, related physical facilities, equipment and grounds.
- b. Make routine repairs and adjustments to buildings and facilities including doors, windows, cabinets, walls and partitions; repair floors and ceilings including hardwood floors, acoustical tile, asphalt tile and other composition material; repair carpeting.

BUILDING MAINTENANCE WORKER (Continued)

- c. Participate in plumbing installations and repairs as necessary; replace broken fixtures; unclog drains; remove obstructions from water and sewer systems; repair leaks.
- d. Repair and prepare surfaces for painting; paint buildings, fixtures and equipment; paint or stain wood structures.
- e. Excavate, prepare, form, pour and finish concrete; repair asphalt.
- f. Perform minor repairs on rooftops; patch holes; clean out drain gutters.
- g. Assemble, set up, move and arrange furniture and equipment; set up rooms as directed.
- h. Lock and unlock doors; open and close campus buildings.
- i. Operate and maintain a variety of hand and power tools including table saws, circular saw, planers, routers, sanders, airless paint sprayer, power drills and welding equipment.
- j. Assist in performing carpentry work including structural fabrication, installation, repair and maintenance tasks during maintenance and repair, remodeling and new construction assignments.
- k. Assist in laying and repairing floors and roofs including working with suspended and tile ceilings, asphalt tile and other composition materials; assist in installing carpeting.
- l. Assist in constructing and repairing school and office furniture, counters, and equipment; assist in performing mill and cabinet work; assist in repairing metal cabinets as necessary.
- m. Assist in building stairways, closets, partitions, cases and shelving; fit doors, windows, sashes, and screens.
- n. Assist in installing and finishing metal frame walls, dry walls and wood paneling.
- o. Maintain maintenance supplies and equipment.
- p. May perform custodial duties including cleaning, stripping and waxing floors, cleaning restrooms and replenishing restroom supplies.
- q. Assist other maintenance staff in performing assigned duties.

9. PAINTER

- a. Prepare interior and exterior surfaces for painting by scraping, brushing, scrubbing, washing, patching and priming.
- b. Finish interior and exterior surfaces with proper interior and exterior water and oil-based paints.
- c. Maintain and refinish a variety of indoor and outdoor equipment, including mechanical, non-mechanical and athletic equipment.
- d. Layout and paint football and soccer fields and equipment, tennis and basketball courts, running track, swimming pool, parking lots, curbs and related campus areas.
- e. Paint traffic signs, curbs, parking and handicapped stalls and other signs or details.
- f. Install wall covering and wallpaper; refinish furniture.
- g. Operate, maintain, clean, and repair a variety of painting tools and machinery; clean work area and protect other surfaces from spattered or sprayed paint.
- h. Maintain storage and inventory of supplies and equipment according to safe practices; properly dispose of hazardous materials according to established safety procedures.
- i. Estimate time, materials, and equipment required for jobs assigned.

10. LOCKSMITH

- a. Install, repair and maintain locking systems to support a controlled access system of the campus through a variety of mechanical and electronic devices including locks, keys and related parts and hardware; re-combine locks; maintain doors and hardware in a safe operational condition..
- b. Repair, replace, install and adjust door locks, cabinet locks and hardware, padlocks and other locking devices; repair and maintain electrically controlled doors; specify electronic access control systems; track and maintain computerized records of facility wide usage.

LOCKSMITH (Continued)

- c. Repair and adjust various types of door closers and holders; repair panic bars and other exit hardware; disassemble door closing and holding parts as necessary for repair purposes.
- d. Maintain master and duplicate key files and records; prepare keys by duplication or from key code; key and re-key various types of locks; maintain keying records.
- e. Input and retrieve keying information using a computerized key system.
- f. Open and repair jammed and vandalized locks; respond to emergency situations as required.
- g. Repair and maintain fire alarm activated hold open devices.
- h. Maintain storage and inventory of supplies and equipment; requisition materials as required.

C. Student/Constituency Satisfaction

The Facilities, Maintenance & Transportation group is now receiving feedback through customer satisfaction survey forms currently being provided with each checked out vehicle; included with the vehicle information package provided at checkout. See attachment "A" for sample survey results.

D. Facilities, Technical Infrastructure, and Resources

Currently the Facilities, Maintenance & Transportation group is divided into two distinct locations, the central plant and the "T" building, located in lower campus. Employees meet and sign in at each location according to their work assignments. Electrical, HVAC, cogeneration, building maintenance and pool workers sign in at the central plant and transportation and irrigation at the "T" building. With the college's growth in both buildings and programs, the current area for the Facilities, Maintenance & Transportation group is not adequate for our needs. In some cases, it hinders the ability to achieving our mission and goals. Transportation originally had the complete use of the "T" building; however, over the past few years, the space has slowly been conceded to the custodians, leaving us with less than half of the building. The central plant has a very small break room, which would be better defined as a multi-purpose room. We currently try to have team meetings in this room, but we are unable to accommodate more than 10 people at one time. With no room for a white board or projector, it is also not suitable for training sessions, safety meetings or presentations.

E. Outreach and Collaboration

Members of the Facilities, Maintenance & Transportation group participate in and attend various meetings and activities such as: career days at various local schools; Saddleback College graduation ceremonies; Saddleback College campus cleanup; lamp/battery recycling; and community education outreach requests as well as disaster preparedness. Saddleback College has also been the recipient of various donations from a variety of local community college supporters in response to our community outreach efforts.

Section III: Needs Assessment

A. Human Resource Needs

It is recommended that the college hire the following six positions:

1. One additional full-time electrician
2. One full-time lead plumber
3. One additional full-time HVAC technician
4. One additional full-time building maintenance worker
5. One additional full-time auto equipment technician
6. One additional full-time irrigation specialist
7. One full-time equipment operator

By hiring these additional positions, annual projects, special work orders and absence coverage would also improve and would require the use of fewer substitutes. It would also improve the overall level of the maintenance services provided to the college

In 1995, we had 1 full time equipment operator – currently we have none

In 1998, we had 4 full time HVAC mechanics -- one more than our current staffing

In 2002, we had 3 full time electricians -- one more than our current staffing

B. Instructional/Service Needs

The Facilities, Maintenance & Transportation group needs to have additional training on the following topics:

1. High voltage safety
2. Pool safety
3. Vehicle driving safety
4. Arc flash welding safety

This will help foster better morale and support continuing education and safety.

C. Research Needs

Induction lighting alternatives

LED lighting alternatives

Alternative fuel sources for college vehicles and equipment (hydrogen, compressed natural gas...)

Micro turbine power technologies

D. Technical, Equipment and Other Resource Needs

1. Two new fork lifts to replace our vintage 1970 and 1980 lifts currently in use
2. One new 55 H.P. Tractor with 45 H.P. PTO and 12x12 shuttle shift
3. One new Dump Truck to replace our vintage 1970 dump truck currently in use
4. One 28 foot equipment handler (reach forklift)
5. Ten new Ford Ranger Pickups with various utility bodies to replace our ageing fleet of carts and old pickups
6. One 40 foot boom lift for parking lot lamp replacement
7. Five new portable generators in various sizes to replace our ageing equipment
8. 5 tons of portable air-conditioning for emergencies
9. MIG welder with Aluminum head attachment
10. Brady 300MVP Plus Thermal Transfer Printer with Cutter for various labels including ARC Flash warning labels
11. Three position pallet jack with control lever that automatically returns to neutral position. Handle must operate from both the rear and side and returns to upright position when released.
12. Two each, 12,000-Lb. Capacity 4 post vehicle lift with rail-kit
13. Set of 4, 15,000 LB. CAP PNEUMATIC swivel casters with kingpin and tow bar to be used for the relocation of cargo containers on campus.
14. Pickup truck mounted parking lot vacuum

E. Facilities Needs

The Facilities, Maintenance & Transportation group is in need of larger and more modern office space, warehouse space and shop space. Our current facilities are too small and too technologically out-of-date to handle our regular team and safety meetings, contractor meetings, AV distance education and presentations. Our office space is too small to adequately provide sufficient space for our leads to communicate corrective action items in private. Our Transportation workshop facilities are in a very distressed building and in need of modernization and expansion. Much of the material and equipment storage for each of our trades is spread throughout the college in various storage containers and storerooms. Our warehouse space is limited at best, and what is available is spread throughout the campus in various rooms and buildings throughout the campus. In some cases, the enormous amount of supplies consumed annually to maintain campus facilities must be stored outside due to a lack of clean, dry covered space. These changes to our facilities would be beneficial in both the morale of this group, and of the division as a whole. It would also allow for better and more efficient use of our maintenance staff and equipment, improving overall utilization and performance.

F. Marketing and Outreach Needs

The Facilities, Maintenance & Transportation group is well-marketed throughout its users on campus, but its achievements go largely unnoticed by the majority of Saddleback College faculty and staff and students.

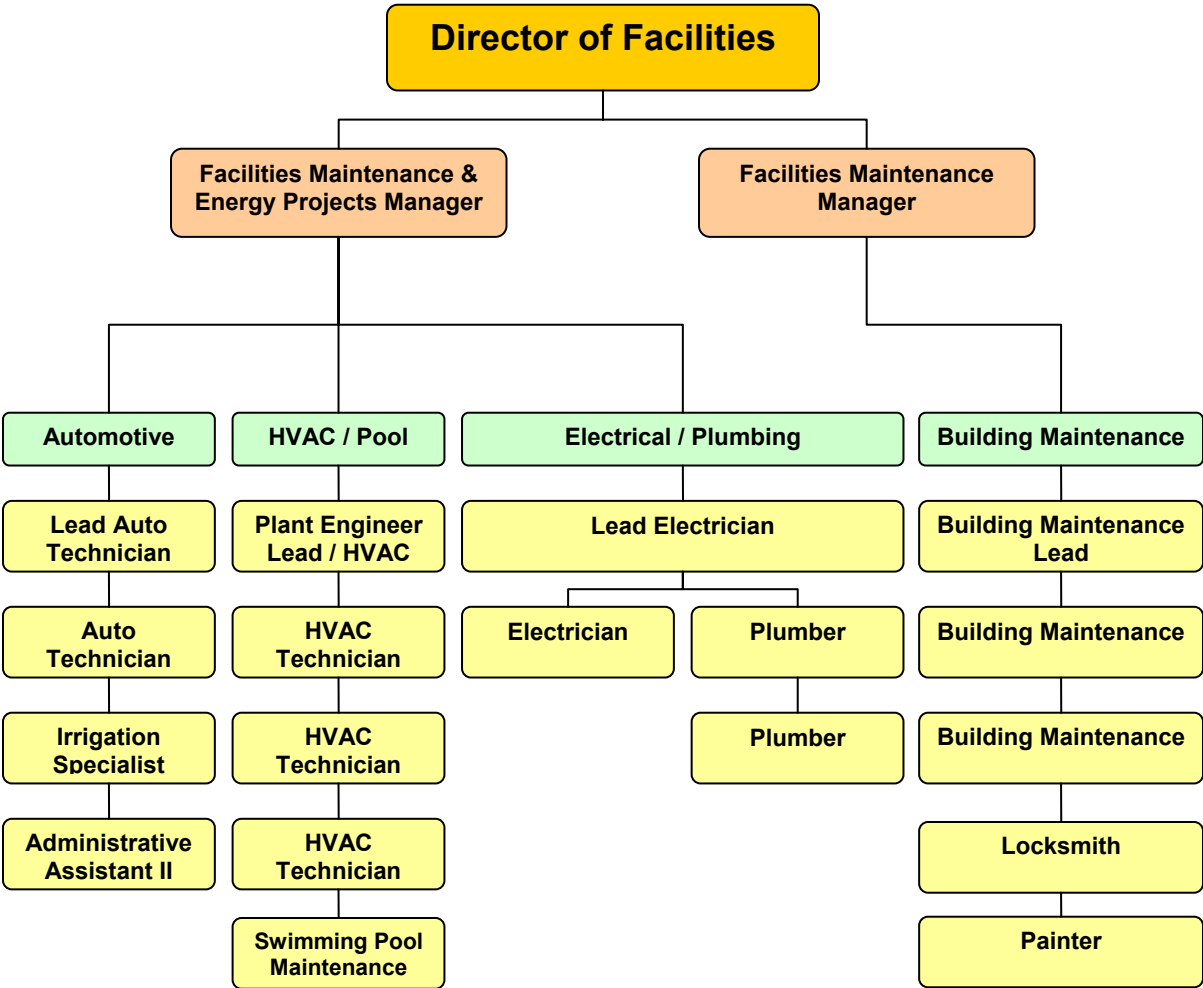
G. Retention Needs

The Facilities, Maintenance & Transportation group does not have a significant problem in retaining team members. However, when one leaves, there is significant difficulty in recruiting qualified personnel to fill our openings at our published starting wages. We tend to attract entry level applicants who would be perfect for an apprentice program if we had one, but are in no way qualified to work unsupervised on a journeyman level. This makes recruiting difficult and time consuming. I would like to suggest that we look at our wages by trade to resolve public / private industry wage inequities in and effort to attract and keep qualified personal.

Section IV: Appendices

A. Unit Organizational Chart

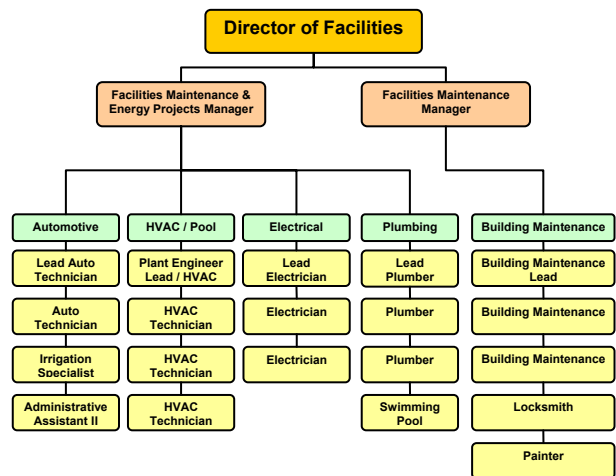
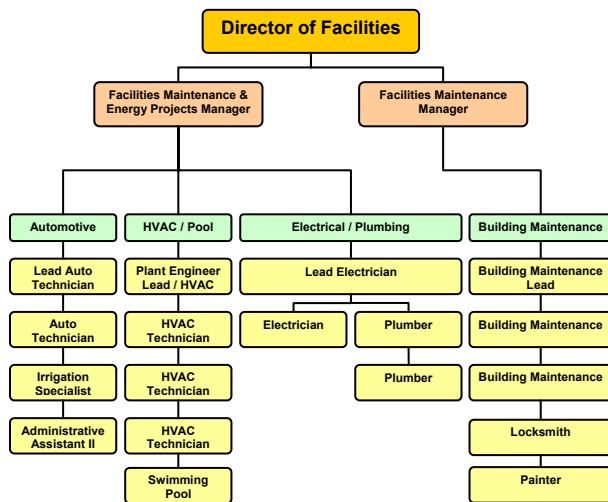
Organizational Structure:



B. Five-Year Program Staffing Profile (staffing increases are highlighted in yellow)

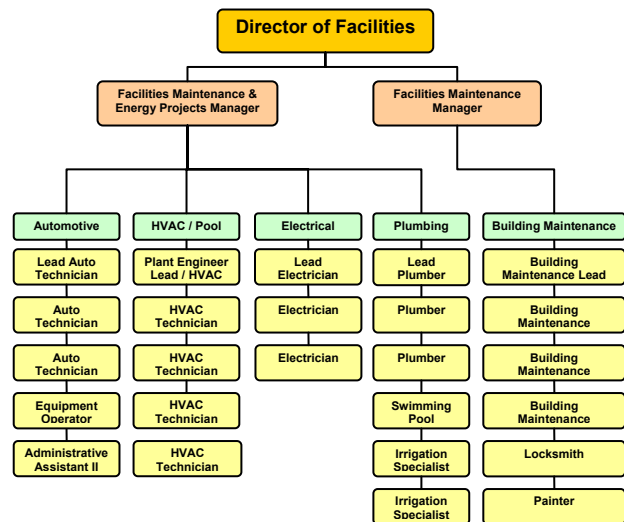
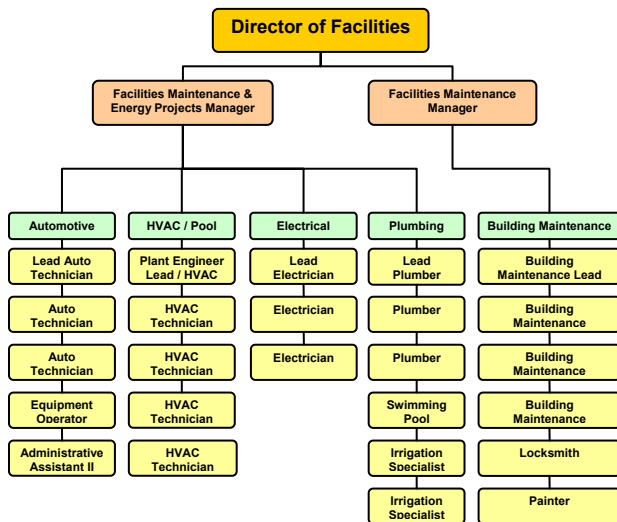
For Year 2007 / 2008
Facilities Maintenance Director
Facilities Maint. & Energy PM
Administrative Assistant
Auto / Equipment Technician Lead
Auto / Equipment Technician
Irrigation Specialist
Electrician Lead
Electrician
Plumber
Plumber
Plant Engineer
HVAC Technician
HVAC Technician
HVAC Technician
Swimming Pool
Building Maintenance Lead
Building Maintenance Worker
Building Maintenance Worker
Painter
Locksmith

For Year 2008 / 2009
Facilities Maintenance Director
Facilities Maint. & Energy PM
Administrative Assistant
Auto / Equipment Technician Lead
Auto / Equipment Technician
Irrigation Specialist
Electrician Lead
Electrician
Electrician
Plumber Lead
Plumber
Plumber
Plant Engineer
HVAC Technician
HVAC Technician
HVAC Technician
Swimming Pool
Building Maintenance Lead
Building Maintenance Worker
Building Maintenance Worker
Painter
Locksmith



For Year 2010 / 2011
Facilities Maintenance Director
Facilities Maint. & Energy PM
Administrative Assistant
Auto / Equipment Technician Lead
Auto / Equipment Technician
Auto / Equipment Technician
Equipment Operator
Irrigation Specialist
Irrigation Specialist
Electrician Lead
Electrician
Electrician
Plumber Lead
Plumber
Plumber
Plant Engineer
HVAC Technician
HVAC Technician
HVAC Technician
HVAC Technician
Swimming Pool
Building Maintenance Lead
Building Maintenance Worker
Building Maintenance Worker
Building Maintenance Worker
Painter
Locksmith

For Year 2011 / 2012
Facilities Maintenance Director
Facilities Maint. & Energy PM
Administrative Assistant
Auto / Equipment Technician Lead
Auto / Equipment Technician
Auto / Equipment Technician
Equipment Operator
Irrigation Specialist
Irrigation Specialist
Electrician Lead
Electrician
Electrician
Plumber Lead
Plumber
Plumber
Plant Engineer
HVAC Technician
HVAC Technician
HVAC Technician
HVAC Technician
Swimming Pool
Building Maintenance Lead
Building Maintenance Worker
Building Maintenance Worker
Building Maintenance Worker
Painter
Locksmith



C. AUO Assessment Forms



*Student Learning Outcomes:
Improving Teaching and Learning*

**Facilities, Maintenance and Transportation
08-2008**

I Expanded Statement of Institutional Purpose	II Administrative/Service Outcomes	III Assessment Method and Criteria for Success	IV Assessment Results	V Use of Results
Support the needs of the college and the district by providing equipment in clean functional condition so as to supporting the Saddleback College goal to inspire and develop through excellence in education, a community of diverse learners dedicated to achieving their full potential in our global society	Refocus our efforts to maintain our vehicles in peak operating condition and expand our fleet to meet the needs of the college and the district by providing 95% uptime of the equipment	Review and respond to customer satisfaction surveys		



*Student Learning Outcomes:
Improving Teaching and Learning*

I Expanded Statement of Institutional Purpose	II Administrative/Service Outcomes	III Assessment Method and Criteria for Success	IV Assessment Results	V Use of Results
Reducing the time required to complete work orders will improve overall customer satisfaction and enable the maintenance depart to complete additional work orders in the same time period	Continue to reduce the time required to complete work orders and achieve a 5% increase in completed work orders	Upgrade work order software program and generate reports to track improvements.		



*Student Learning Outcomes:
Improving Teaching and Learning*

I Expanded Statement of Institutional Purpose	II Administrative/Service Outcomes	III Assessment Method and Criteria for Success	IV Assessment Results	V Use of Results
A reduction in energy consumption will help to allow the college to save money on utilities and fuels	Continue to implement energy conservation measures and achieve a 4% reduction in energy and fuel consumption	Energy conservation can be measured by a reduction in overall energy and fuel consumption		

D. Supporting Data

¹ CaliforniaCollege.Edu
(http://www.californiacolleges.edu/CampusTour/undergraduate/1094/Saddleback_College/Saddleback_College1.html)

² Campus size and enrollment data captured from
(http://www.socccd.cc.ca.us/PDF/SC_2006_NEWSLTR.pdf)

³ the breakdown of the 8,953 work orders is as follows (2,886 HVAC, 586 plumbing, 1,273 electrical, 13 irrigation, transportation 947, building maintenance 1,985, paint 93, locksmith 279 and swimming pool with 891,)

⁴ Wikipedia encyclopedia
(http://en.wikipedia.org/wiki/Saddleback_College)

E. Other

None

NOTES:

The things we take for granted today were not even remotely considered possible 40 years ago. Therefore, the infrastructure needed to support a college campus 40 years ago is very different than today. We now have at least one computer and one overhead projector installed in every room on campus, some even have more. The electrical demands are now greater than ever imagined. The increased cooling demands now required to keep the electronic necessities running has created challenges that were totally unforeseen in 1970. We now have plumbers that must understand and service electronic flushometers and faucets, and locksmiths that must service and repair sophisticated electronic locking hardware and door openers. Electricians now must program campus-wide building management systems and special lighting controls along with our HVAC technicians. Transportation is even impacted by the computer age and the sophisticated diagnostic equipment now required just to determine what's not working in a car. Suffice it to say that the entire staff of the Facilities, Maintenance & Transportation group is adept at learning new things and keeping up and/or staying ahead of today's ever-changing environment.

Attachment "A"

Satisfaction Survey

Date: 4/25 2008
TODAY'S DATE

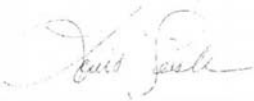
Name: Chuck Rogers
PLEASE PRINT YOUR NAME HERE

Department: FINE ARTS
PLEASE PRINT YOUR DEPARTMENT'S NAME HERE

For each of the survey questions listed below, please circle the number that best represents your level of satisfaction. 5 representing Very Satisfied and 1 representing not very satisfied. Please use the space provided below to list any additional comments you may feel will be helpful.

Survey Questions

	VARY SATISFIED	SATISFIED	GOOD	NEEDS IMPROVEMENT	NOT VARY SATISFIED
1. Was your request handled professionally	5	4	3	2	1
Comments:					
2. Were all your questions answered to your satisfaction	5	4	3	2	1
Comments:					
3. Was the type of vehicle you requested available	5	4	3	2	1
Comments:					
4. Was your vehicle available at the time requested	5	4	3	2	1
Comments:					
5. Was the vehicle in clean and in good working order	5	4	3	2	1
Comments:					
6. Was the driver package with the vehicle and complete	5	4	3	2	1
Comments:					
7. How would you rate your overall experience	5	4	3	2	1
Comments:					


Louis Sessler

To advance our ongoing commitment to improvement, The Facilities Maintenance and Transportation Group would like to thank you for taking the time to answer these few very important questions. The answers to these questions and your comments will be used to help us continue to maintain the highest level of customer satisfaction.

Attachment "A"

Satisfaction Survey

Date: 4 / 10 / 2008
TODAY'S DATE

Name: Avery Caldwell
PLEASE PRINT YOUR NAME HERE

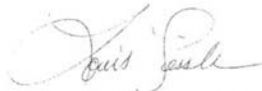
Department: Technology & Applied Science
PLEASE PRINT YOUR DEPARTMENT'S NAME HERE

For each of the survey questions listed below, please circle the number that best represents your level of satisfaction. 5 representing **Very Satisfied** and 1 representing not very satisfied. Please use the space provided below to list any additional comments you may feel will be helpful.

SADDLEBACK COLLEGE

Survey Questions

	VARY SATISFIED	SATISFIED	GOOD	NEEDS IMPROVEMENT	NOT VARY SATISFIED
1. Was your request handled professionally	5	4	3	2	1
Comments:					
2. Were all your questions answered to your satisfaction	5	4	3	2	1
Comments:					
3. Was the type of vehicle you requested available	5	4	3	2	1
Comments:					
4. Was your vehicle available at the time requested	5	4	3	2	1
Comments:					
5. Was the vehicle in clean and in good working order	5	4	3	2	1
Comments:					
6. Was the driver package with the vehicle and complete	5	4	3	2	1
Comments:					
7. How would you rate your overall experience	5	4	3	2	1
Comments:					



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Satisfaction Survey

Date: 4/10/2008
TODAY'S DATE


Name: JAY AMOS
PLEASE PRINT YOUR NAME HERE

Department: Athletics
PLEASE PRINT YOUR DEPARTMENTS NAME HERE

For each of the survey questions listed below, please circle the number that best represents your level of satisfaction. 5 representing **Very Satisfied** and 1 representing not very satisfied. Please use the space provided below to list any additional comments you may feel will be helpful.

Survey Questions

	VARY SATISFIED	SATISFIED	GOOD	NEEDS IMPROVEMENT	NOT VARY SATISFIED
1. Was your request handled professionally	(5)	4	3	2	1
Comments:					
2. Were all your questions answered to your satisfaction	(5)	4	3	2	1
Comments:					
3. Was the type of vehicle you requested available	(5)	4	3	2	1
Comments:					
4. Was you vehicle available at the time requested	(5)	4	3	2	1
Comments:					
5. Was the vehicle in clean and in good working order	(5)	4	3	2	1
Comments:					
6. Was the driver package with the vehicle and complete	(5)	4	3	2	1
Comments:					
7. How would you rate your overall experience	(5)	4	3	2	1
Comments:					



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Satisfaction Survey

Date: 4/11/2008
TODAY'S DATE

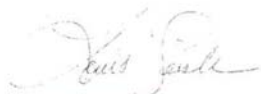
Name: JENNIFER HIGGINSON
PLEASE PRINT YOUR NAME HERE

Department: KINESIOLOGY/PE
PLEASE PRINT YOUR DEPARTMENT'S NAME HERE

For each of the survey questions listed below, please circle the number that best represents your level of satisfaction. 5 representing **Very Satisfied** and 1 representing not very satisfied. Please use the space provided below to list any additional comments you may feel will be helpful.

Survey Questions

	VARY SATISFIED	SATISFIED	GOOD	NEEDS IMPROVEMENT	NOT VARY SATISFIED
1. Was your request handled professionally	5	4	3	2	1
Comments:					
2. Were all your questions answered to your satisfaction	5	4	3	2	1
Comments:					
3. Was the type of vehicle you requested available	5	4	3	2	1
Comments:					
4. Was your vehicle available at the time requested	5	4	3	2	1
Comments:					
5. Was the vehicle in clean and in good working order	5	4	3	2	1
Comments:					
6. Was the driver package with the vehicle and complete	5	4	3	2	1
Comments:					
7. How would you rate your overall experience	5	4	3	2	1
Comments:					



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Satisfaction Survey

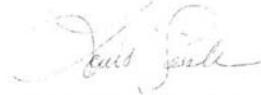
Date: 4-16-08 / 2008
TODAY'S DATE

Name: Miki Mikdajczak
PLEASE PRINT YOUR NAME HERE

Department: Transfer Center
PLEASE PRINT YOUR DEPARTMENT'S NAME HERE

For each of the survey questions listed below, please circle the number that best represents your level of satisfaction. 5 representing **Very Satisfied** and 1 representing not very satisfied. Please use the space provided below to list any additional comments you may feel will be helpful.

	VARY SATISFIED	SATISFIED	GOOD	NEEDS IMPROVEMENT	NOT VARY SATISFIED
1. Was your request handled professionally	5	4	3	2	1
Comments:					
2. Were all your questions answered to your satisfaction	5	4	3	2	1
Comments:					
3. Was the type of vehicle you requested available	5	4	3	2	1
Comments:					
4. Was your vehicle available at the time requested	5	4	3	2	1
Comments:					
5. Was the vehicle in clean and in good working order	5	4	3	2	1
Comments:					
6. Was the driver package with the vehicle and complete	5	4	3	2	1
Comments:					
7. How would you rate your overall experience	5	4	3	2	1
Comments:					



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Satisfaction Survey

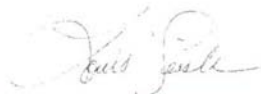
Date: 4 17 2008
TODAY'S DATE

Name: LORI Parra
PLEASE PRINT YOUR NAME HERE
Department: Counseling Special Programs
PLEASE PRINT YOUR DEPARTMENTS NAME HERE

For each of the survey questions listed below, please circle the number that best represents your level of satisfaction. 5 representing Very Satisfied and 1 representing not very satisfied. Please use the space provided below to list any additional comments you may feel will be helpful.

Survey Questions

	VARY SATISFIED	SATISFIED	GOOD	NEEDS IMPROVEMENT	NOT VARY SATISFIED
1. Was your request handled professionally	5	4	3	2	1
Comments:					
2. Were all your questions answered to your satisfaction	5	4	3	2	1
Comments:					
3. Was the type of vehicle you requested available	5	4	3	2	1
Comments:					
4. Was your vehicle available at the time requested	5	4	3	2	1
Comments:					
5. Was the vehicle in clean and in good working order	5	4	3	2	1
Comments:					
6. Was the driver package with the vehicle and complete	5	4	3	2	1
Comments:					
7. How would you rate your overall experience	5	4	3	2	1
Comments: <u>pleasant staff - always helpful</u>					


Louis Sessler

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