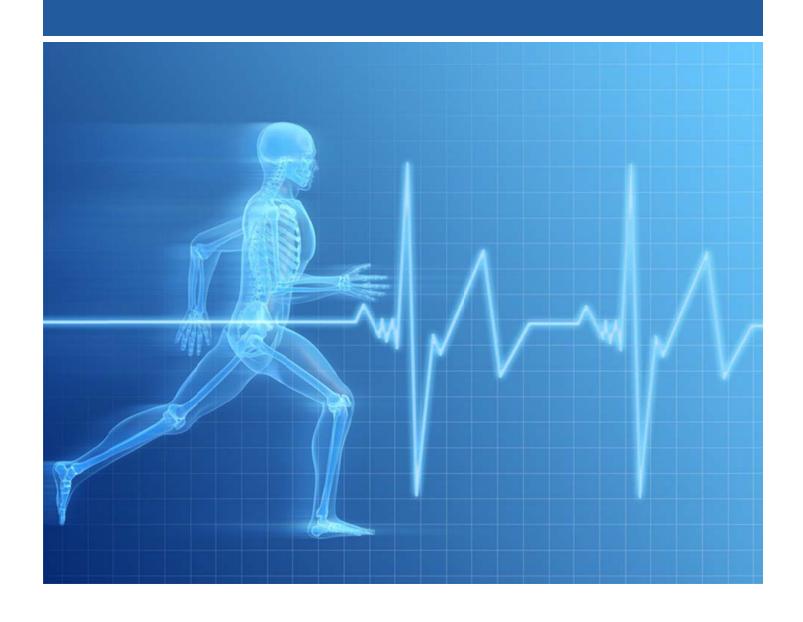
# The Regional Economic Impact of Physical Education & Athletics Programs



This spring 2011 report was generated by a Los Rios Community College District task force, which was charged with articulating the economic impact and academic importance of Kinesiology, Health, and Athletics programs at the four Los Rios colleges: American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College. The members selected through the district's participatory governance process to comprise the task force included:

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The task force wishes to thank the Los Rios Community College District staff, the Los Rios Community College District Center of Excellence (COE) staff, the Los Rios Community College District Economic and Workforce Development staff, and the Los Rios Community College District Office of Institutional Research staff for their contributions to the report.

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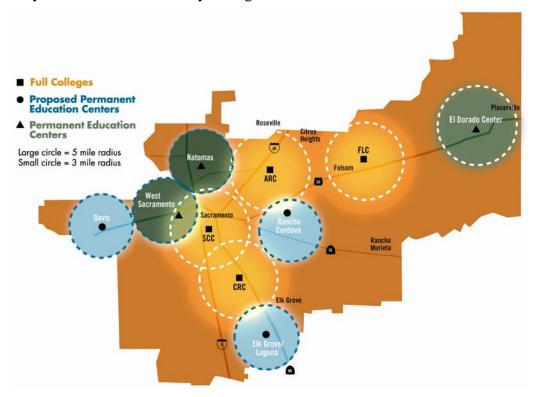
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# The Regional Economic Impact of Physical Education & Athletics Programs

# Introduction

The Los Rios Community College District is comprised of American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College. The district collectively services four counties (Sacramento, Yolo, El Dorado, and Amador), 2,400 square miles, and annually enrolls nearly 90,000 students. The district also operates a variety of educational centers and outreach centers, an integral part of the 'centers' concept previously enacted by the Los Rios Community College District board of trustees.



Student success is the primary goal of the Los Rios Community College District and its member colleges. Whether students come to a college to take one course to develop a specific skill, re-tool or re-orient their career, learn English or take a citizenship class, obtain a degree or certificate, transfer to a four-year institution, or study a topic for personal enrichment, the *common link is that they move closer to an important personal objective* which nearly always results in them becoming productive citizens in their local community. Nearly 2.5 million people, over nine percent of the state's adult population, attended a California community

college in 2009-10 to advance their goals; nearly 100,000 of them chose a Los Rios Community College.

Los Rios offers a variety of degrees and certificates to meet the unique educational goals of its students. One such program, kinesiology, or the study of human movement, has seen a surge in popularity over the last 20 years that experts attribute to its *social relevance*, its relation to the obesity epidemic, and the growing societal importance of sports and athletics. Although kinesiology may find critics among those who just picture it as a gym class, the *curriculum has developed over the years to offer courses that extend beyond physical education to psychology, sociology, neurology, and biomechanics*. Many students are straying from traditional kinesiology careers like coaching or fitness instruction and more than half pursue other quickly-growing allied health or medical professions like athletic trainer, occupational therapist or physician assistant (Jensen, 2009). A new need for elementary- and middle-school physical education coaches is also on the horizon, as the movement to improve children's health continues. The kinesiology and athletics programs at Los Rios not only offer students the life-changing experience of participation in inter-collegiate athletics and healthful activities, but have a tremendous social, academic, and economic impact on our students and our service region as a whole.

# The Social and Academic Relevance of Kinesiology & Athletics Programs

The excitement of community college athletics lies in the opportunity the program gives students to excel physically; the excitement of higher education lies in the opportunities it gives students to excel mentally. Setting standards of excellence –and sustaining structural support – for both intercollegiate athletics and educational programs is the only acceptable course and the only one that will assure that the term "student athlete" means what it says (Keihn, 1997).

We Americans love sports. We love to compete and *believe in its benefits*. And while we come together in non-competitive ways to share friendship, conversation and knowledge, we love competition even more. We have even chosen it as our economic structure – capitalism. It is small wonder, therefore, that America's colleges and universities – institutions that reflect and advance our culture – have embraced athletics for more than a century. Indeed, intercollegiate athletics has developed a firm position in our culture. The collegiate model of sports is unique and uniquely American (Van Horn, 2009).

In the collegiate model, the enterprise is higher education. Intercollegiate athletics is part of higher education, an extension of the learning environment. Collegiate athletics do not exist in isolation. Community colleges, especially large public institutions, are extraordinarily complex.

They are responsible not only for serving anyone who can benefit from the instruction offered, but also support programs, creative activity, and research that improves students' quality of life in

In its purist form, the collegiate model views the participants – the student athletes – as students in pursuit of an education. The collegiate model is an extension of the institutional mission, aligned with its vision and values.

the teaching and learning process. Athletics has a role to play within this complex mission.

This is not to say that athletics success is unimportant, nor is the role of coaches and the campus athletics organizations insignificant. To the contrary, they are essential. But the central feature of the collegiate model is the success of participants as students, which provides the core framework that result in these students being productive, successful workers in their local communities.

The collegiate model has evolved during the past 150 years and it continues to be dynamic. In the last 20 to 30 years, the changes have been motivated by internal factors, a growing emphasis on specialization and winning, for example, as well as, by external forces such as the interest of the broadcast media in college sports as programming inventory. The collegiate model is based on education. At its best, which is most of the time, intercollegiate athletics provides millions of people, athletes, undergraduates, alumni, and the general public, with great pleasure, the spectacle of extraordinary effort and physical grace, the excitement of an outcome in doubt, and a shared unifying experience (Knight Foundation, 1991). Thousands of men and women in the Sacramento region are stronger adults, more productive contributors in their local communities, and healthier employees because of the challenges they mastered as young student athletes attending Los Rios colleges.

The *value* of the collegiate model, and specifically to Los Rios colleges' collective athletics program, is its *educational function*. The fundamental key to a continuing association between athletics and each Los Rios college is a value-based appreciation of the collegiate model. In the collegiate model, the student athlete's primary reason for attending the college is to obtain an education. That education consists of both the learning involved in achieving a degree and learning for life. The latter includes developmental learning that occurs as a participant in community college athletics (Van Horn, 2009).

# The Academic Impact of Kinesiology (Physical Education) & Athletics Workforce Trends in the Field of Kinesiology

By 2018, the number of physical therapists in the United States is projected to grow by 30.3 percent, but the number of students majoring in kinesiology, a field in which many physical therapists hold a degree, is growing at *an even faster rate*. According to the American Kinesiology Association, the number of *undergraduate kinesiology majors grew 50 percent from 2003 to 2008, to more than 26,000 students, making it one* of the fastest-growing majors in the country (Inside Higher Ed, 2010).

Within the Sacramento Metropolitan Statistical Area (MSA), there is a substantial surge in employment opportunities for Fitness Trainers and Aerobic instructors. The labor market information division (LMID) indicates these Kinesiology professions will grow 18.1% from 2006 - 2016 (EDD, 2010). The labor market information covers the four-county Sacramento

region
including: El
Dorado, Placer,
Sacramento
and Yolo
counties, which
are included in
the service area
of the Los Rios
Community
College District

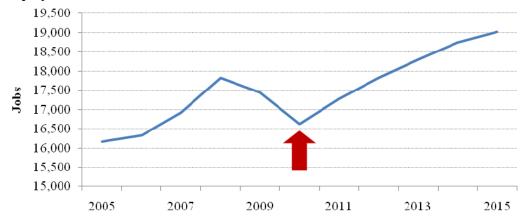
# PE/Athletics Employment Impact by Major Industry Group

Industry Description	Direct Impacts	Industry Purchases	Employee Spending	Total
Sports Teams, Racetracks, and Other Spectator Sports	2,906	483	997	4,164
Promoters and Agents	1,894	603	468	2,861
Golf Courses, Skiing Facilities, and Other Recreation Industries	6,374	1,811	1,276	9,461
Fitness and recreational sports centers	6,652	566	638	7,456
Total Impact	17,826	3,462	3,380	23,942

and its member colleges. In 2006, Los Rios colleges hosted an employer convergence summit to identify the knowledge, skills, and abilities needed by such fitness professionals. Twenty-seven (27) employers participated in the survey project, representing 91 area facilities and nearly 1,200 employees in training occupations. 68% - 71% of employers rated knowledge of anatomy, kinesiology, and exercise physiology as very important, while 60% -67% rated health screening, program design and fitness assessment as very important. Only the ability to effectively perform CPR surpassed the number one skill that employers desired which was communication skills (78% rated this very important).

Identifying long-range economic and workforce trends is critical to anticipating the needs of the economy in both the near and distant future. When trends are identified early, the colleges and its partners can plan for future needs. Economic trend analysis is routinely conducted at the national, state and local levels by agencies such as the Department of Finance, Employment Development Department, Economic Strategy Panel, chambers of commerce, city and county

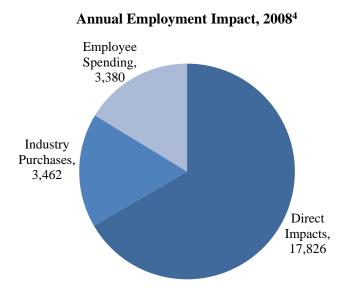




economic development agencies, and other public and private entities. The Los Rios colleges regularly partner with these entities for data collection. They also generate their own data

through a district institutional research office, its economic and workforce development unit, and host a cutting-edge entity known as the Center of Excellence (COE). The COE often partners with the Los Rios colleges, including this project (see Appendix A), and generates a series of laser-focused reports that summarize fresh, robust data used by the colleges in decision-making for program development and other initiatives sponsored by the colleges.

The PE/Athletics sector had a \$1.8 billion economic impact on the Sacramento Region in



2008. The four Los Rios colleges remain vital contributors to economic development in their communities at the local and regional level. Los Rios colleges routinely collaborate with employers and other agencies to develop programs for workforce development that are in direct response to identified needs and assist in creating new curriculum used by regional attraction agencies to incent companies to (re)locate to the region (e.g., Green Capital Alliance, Valley Vision, Partnership for Prosperity). But, a broader engagement is needed in collaborative economic and workforce

development networks involving the K–12 system, regional occupational programs, business and industry, labor, and a range of state, municipal, non-profit and county agencies (California Community Colleges System Strategic Plan, 2006).

# **Career Pathways in Kinesiology - Educational Partnerships**

An emerging state and national trend is focused on establishing career pathways among segments of education; specifically, secondary and postsecondary systems of education are increasingly required to demonstrate career linkages, beginning in the 9th grade. These linkages, called Programs of Study, are designed with a worthy purpose: to increase the ability of younger students to access seamlessly, and to understand, academic steps that lead to either successful transfer or employment. Programs of study are intended to support the academic and career technical achievement of students in career technical education (CTE) programs, including Kinesiology, Physical Education Theory, and related disciplines. Los Rios colleges are leading regional efforts to create these programs of study with secondary school districts in the Sacramento MSA. It is essential that all the components of the entire CTE system be effectively linked. The educational 'alignment' of educational systems incorporates several elements,

including: course sequencing, pathways, articulation, and coordination across sectors. Programs of study include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits.

CTE courses in Kinesiology, Physical Education Theory, and related disciplines, therefore, require coherent course sequences within the K–12, community college, and area universities' systems. The result is that learning is enhanced through integration and course sequences are best implemented though coherent pathways that align CTE and academic instruction.

The emergent thinking about career pathways as a critical economic development tool that leverages the concept of industry clusters to develop workforce talent and skills that can meet the needs of regional and state economies is a guidepost used by Los Rios Kinesiology programs and represent a transition from activity-related classes to CTE-focused career programs.

Within the Los Rios colleges, career pathways are not simply viewed as another program or "major," but rather as a framework for transforming educational institutions to meet the ongoing learning needs of students and industries. The ultimate goal is to provide a seamless system of career exploration, preparation, and skill upgrades linked to academic credits and credentials. Ideally, this system would have multiple entry and exit points spanning from middle school through postsecondary education to adult education and workforce training.

Efforts are currently underway to organize pathways among the K–12, adult school, and community college systems. At the secondary level, the implementation of the CTE Model Curriculum Standards will help standardize and organize the pathways. The Los Rios community colleges are using SB 70, informed by Economic Development initiatives, as a vehicle to promote pathways formation aligned with regional economic development priorities. They are also "cross walking" existing majors with the 15 industry sectors and pathways identified in the CTE Model Curriculum Standards to facilitate secondary to postsecondary alignment.

In the current economy, *high-wage*, *high-growth* employers require a workforce with high levels of basic skills, as well as the ability to adapt quickly to changing and more complex technology. In a state where significant numbers of students fail to graduate from high school and many others, both in and outside the workplace, lack critical core and applied skills, community colleges as an institution need to develop new and comprehensive approaches to workforce development. Integration of academic and career fields is one of several approaches that provide a focus for progressive education and training integrated with upward career mobility (California Community Colleges System Strategic Plan, 2006, pg. 46).

# **Kinesiology Degrees & Certificates**

Los Rios colleges' Kinesiology faculty has responded to business and industry needs by encouraging the development of high-growth occupational programs within the Sacramento

region. The response by Los Rios faculty is especially evident in existing/new degree programs and workforce certificate programs. Today, the Los Rios colleges offer ten (10) Kinesiology degree programs and ten (10) Kinesiology certificate programs. The 20 programs within one instructional discipline/department is *among the highest of any discipline* (including general education, transfer, and basic skills programs) offered at Los Rios colleges. All 20 programs are either in direct response to identified needs of employers in the Sacramento region or classified as academic transfer programs to area universities/colleges. The degree programs include: Dance studies, Physical Education, Sports Medicine, Exercise Science, and Athletic Training. Career technical education workforce certificates include Athletic Coaching, Fitness Instructor, Personal Trainer, Coaching, Fitness Specialist, and Group Fitness. In some instances, the programs highlighted below are offered at multiple Los Rios colleges. The majority are targeting programs of study with secondary schools.

Title	Kinesiology-Exercise Science
Catalog	Physical Education
Department	
Description	The program is typical of lower-division requirements for four-year colleges and universities (though the specific science requirements tend to vary from college to college). For specific requirements, students should refer to a catalog of the college of their choice.
	Students must complete a standard college preparatory program, especially intermediate algebra and chemistry.
Career Opportunities	Most career options require a Bachelor's degree. Once a Bachelor's degree is obtained, career opportunities include teaching, coaching, various recreation positions, various health careers, and athletic administration in elementary and secondary schools and colleges.

Title	Kinesiology-Athletic Training
Catalog	Physical Education
Department	
Description	This program is designed to prepare the student athletic trainer for transfer to a four-year
	university by having many of the lower-division requirements completed (specific science
	requirements vary from college to college). Students wanting to be NATA Certified need to
	complete their Bachelor's Degrees.

Title	Sports Medicine
Catalog	Physical Education
Department	
Description	This degree is designed to prepare students for transfer in the area of athletic training,
	exercise science, kinesiology, and other sports medicine related fields. Prevention,
	identification, evaluation, treatment, and rehabilitation of athletic injuries are emphasized.

Title	Group Fitness Instructor Certificate
Catalog	Physical Education
Department	
Description	The Group Fitness Instructor Certificate program is designed to provide students with the
	theoretical knowledge and practical skills necessary to be successful in the field of group
	fitness instruction. In addition, this certificate will prepare students to sit for the
	American Council on Exercise's Group Fitness Instructor examination.
Career	Group fitness instructor
Opportunities	Activities director
	Corporate fitness program director
	Fitness facility manager

Title	Personal Trainer Certificate
Catalog	Physical Education
Department	
Description	The Personal Trainer Certificate program is designed to provide students with the theoretical knowledge and practical skills necessary to be successful in the field of personal training. In addition, this certificate will prepare students to sit for the American Council on Exercise's Personal Training examination.
Career	Personal Trainer
Opportunities	Fitness Facility Manager
	Wellness consultant
	Activities Director

Title	Interdisciplinary Studies: Understanding and Self Development
Catalog	Interdisciplinary Studies
Department	
Additional	Early Childhood Education, Health Education, Physical Education, Psychology, Sociology
Departments	
Description	The Interdisciplinary Studies degree is designed for students who wish a broad knowledge
	of arts and sciences plus additional coursework in a prescribed "Area of Emphasis." The
	student will be able to satisfy general education requirements, plus focus on transferable
	course work that relates to a specific major and/or individual interest. Students will learn
	how to incorporate these principles into their own lives. Students will be able to critically
	evaluate their personal choices regarding disease prevention, healthy living, and making
	positive life choices.

Title	Coaching
Catalog	Physical Education
Department	
Description	The Coaching Certificate program will help coaches at all skill levels improve their
	knowledge and enhance their ability to be effective in coaching principles, theory of their
	particular sport, First Aid and CPR, and hands on experience coaching. Included within the
	completed course work is eligibility for certificates from the National Federation of State
	High School Association and the American Sport Education Program.

# The academic interconnectivity of Kinesiology within other academic programs

Often, perceptions exist that suggest Physical Education /Kinesiology programs are isolated disciplines unique from other academic disciplines. *The perception is understandable but not accurate*. As examples, the following (Table 1) identifies selected Physical Education and/or Kinesiology courses that are required in other disciplines' academic certificate and/or degree programs within the four Los Rios colleges:

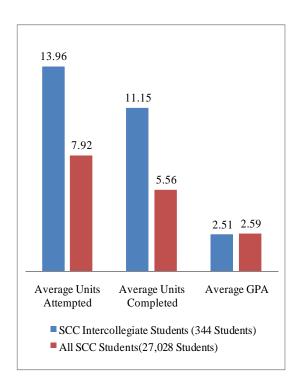
Table 1: Kinesiology courses required in other discipline programs

Certificate and/or Degree Title	Embedded PE/KINES courses required for certificate and/or degree completion
Liberal Arts AA degree	Personal Wellness
Dance AA degree	Multiple offerings ranging from Modern to Jazz dance
Musical Theatre certificate	Jazz Dance, Ballet, Theatre Dance
Green Pre-Apprenticeship certificate	Workforce Wellness
Gerontology certificate	Introduction to Physical Education
Health Care AA degree & certificate	Theory and Techniques of Adapted Physical Education
Recreation Management AA degree	Laboratory in Adapted Physical Education
Women's Studies AA degree	Personal Safety
Dance Studies AA degree	Nutrition for Fitness
Nutrition and Fitness for Aging Adult certificate	Designing Fitness Training for the Active Older Adult

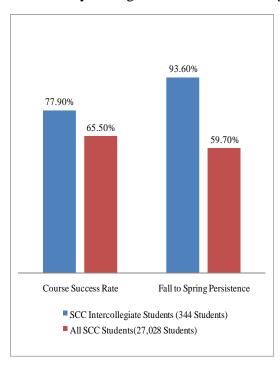
Note: For brevity, the list includes selected PE/KINES courses, not all PE/KINES course options.

### **Student Athletes and Student Success**

Each year, nearly 1,200 student athletes participate in one or more of 23 sanctioned intercollegiate sports offered at Los Rios colleges. All student athletes are required to maintain a "C" average in coursework, a 2.0 grade point average, and maintain a minimum of twelve (12) units each semester. Student athletes are prohibited from receiving scholarships (except those services available to all students, including Board of Governors waivers, Financial Aid, grants, etc.) and often are faced with balancing part-time employment with academic and sport team responsibilities during their two-years as a student athlete. Despite these numerous restrictions, across numerous core indicators associated with educational attainment. student athletes at Los Rios colleges perform better academically than the general student population. For example, the chart below represents a sampling of nearly 350 students



athletes enrolled at Sacramento City College in fall 2009 semester. Student athletes at Sacramento City College were enrolled in a higher number of academic units/classes, dropped



classes at a lower rate than general students, succeeded in completing the course(s) at a higher rate than general students, and more than nine-in-ten re-enrolled (persisted) in the following semester.

Note: Data collected by Los Rios CCD Research Office in December 2010.

# Support for Kinesiology & Athletics from the Neurosciences

Los Rios statistics on student athletes' academic success is not an anomaly. A recent study of middle and high school students investigated the predictive value of physical activity and sports participation on academic performance (Fox, Barr-Anderson, Neumark-Sztainer, & Wall, 2010). The results showed that for high school girls, physical activity and sports participation predicted higher GPA and both

activities independently predicted higher GPA. For high school boys only sports participation served as an independent predictor of higher GPA. Others have found that the study of dance also enhances student learning (Gazzaniga, 2008). Participation in dance has been shown to increase observational learning skills via neural substrates that organize complex skill sequences and this ability may transfer to other areas of learning.

Physical activity and physical fitness are also positively correlated to academic performance in elementary school children (Trost, 2007) due to enhanced focus and decreased absenteeism (Geier, Foster, Womble, McLaughlin, Borradaile, Nachmani, et al., 2007).

Thus, the inclusion of physical education and athletics in an academic environment is a simple strategy for stimulating neurogenesis and subsequent improvements in learning, memory, mood (Jensen, 2009), and academic performance (Fox, et al., 2010; Trost, 2007; Geier, et al., 2007).

In response to naysayers who refuse to discard old models of thinking which undervalue all but the "core curriculum," Jensen gives the following response:

Some critics assert that sociology, physical fitness, psychiatry, nutrition, psychology, and cognitive science are not "brain-based." That assertion is old-school, "turf-based," and outdated. If the research involves the brain in any way, it is "brain-based." The brain is involved in everything we do (Jensen, 2009).

# Our Kinesiology students speak for themselves

Our four colleges are springboards of opportunity. There is *no other system of higher education* that offers citizens: access to high quality education, opportunities for personal and professional development, access to state-of-the-art facilities, and distinguished, acclaimed faculty (not teaching assistants or graduate students), who focus on helping students achieve their goals. Hundreds of students are better prepared for life and are more productive citizens as a result of their experiences at Los Rios community colleges. Kinesiology students and student athletes pursuing their educational goals are better citizens as a result of their participation in Kinesiology courses and sport courses. Many of these successful students arrived at our colleges short on personal confidence, lacking career direction, uncertain of their own academic abilities, and questioning their own self-worth and value. Participation, as their birthright, in Kinesiology classes and, for some, intercollegiate sport classes, immensely shaped a positive direction for these students, well beyond their affiliation with a Los Rios college. The stories are compelling and seek to demonstrate our belief that success is readily achieved for those who are willing to sacrifice and dedicate themselves to a lifelong goal that extends well beyond the playing field, lecture, lab, or board room.

Kinesiology students enrolled at Los Rios colleges have been shaped by past life experiences that impact significantly their educational attainment. Many, however, overcome those obstacles with the help of Kinesiology faculty. For some, enrollment in Kinesiology courses alters their life goals and, to others, saves lives! Consider the following testimonial from Greg Brown, a 25-year old student who suffered a heart attack. This story was told to one faculty member in fall 2010 and speaks to the impact of offering Kinesiology classes and the discipline's importance in creating communities of healthier citizens:

"The day started out just like any other day; at the time I was a 25 year old college student studying to become a computer programmer. I had just gotten off work and was heading back to my dorm room, when I began having chest pains. I have had them before, but this

"A heart attack. Those words stuck in my head. At 25 years old, I had a mild heart attack. Nothing about that statement seemed right."

was unlike anything I had ever felt before; this pain came with a tingling sensation in my left arm. I knew right away there was something really wrong with my heart. The pain only lasted for a few moments and I was fine. At 25 years old, I had a mild heart attack. Nothing about that statement seemed right. I had myself weighed and my measurements done and I weighed 286 pounds and was 43% body fat. I knew I was big, I wasn't blind to that, but seeing the numbers made them all the more real. I wanted to live a very long

life and for the first time, I saw my weight as not only keeping me from this goal, but guaranteeing that I wouldn't achieve it. Something had to be done.

I took a year of my life to focus on my health full time. By the end of that year, I had lost 134 pounds and currently have a body fat percentage between 10-13%. A lot of things changed within that year, one of them being my career goals. The idea of spending eight hours in front of a computer screen no longer had the same appeal. By getting my health in order, I realized that I wanted to do the same for other people. Obesity is a condition that doesn't just affect you physically; it affects you mentally as well. If I can help one person avoid this, or bring them back, then my work on this Earth is done. This is why I decided to become a personal trainer and group fitness instructor.

During that year, the happiest moments weren't when I stepped on the scale and saw how much weight I had lost during that week. Those moments came when I realized that I was able to bend over and tie my shoes, when I was able to walk up a flight of stairs, when I was able to walk to the corner store with ease, and culminating with being able to run a marathon. These are the simple joys that I want to help other people experience."

Note: The above is the unedited story as told to us by a student who enrolled at a Los Rios college in fall 2010. This student recently reconnected with the faculty member to announce passing his certification exam and will be employed as a personal trainer in San Francisco.

The following quotes are from former and current Los Rios students:

- "...My transcripts have been submitted to several learning institutions, so the grades I get in kickboxing and yoga really won't matter or change anything as far as academics go But, spiritually, and emotionally, these 2 classes have mattered very much to me! I just wanted you to know that. It always amazes me how throughout our lives, we look back and notice how a stranger has impacted our lives or how we may have impacted or left an impression on someone else's life."
- "...My yoga class has allowed me to learn to relax, let go and possibly forgive "him" as much as a person can."
- "... "I am going away with a better knowledge of the nutrient requirements my body has and how to meet them. Most helpful thing I have learned in a long time!"

"...My self-esteem has skyrocketed since enrolling in Dance classes. My level of comfort with my physical being has improved my spiritual, psychological, and emotional well-being."

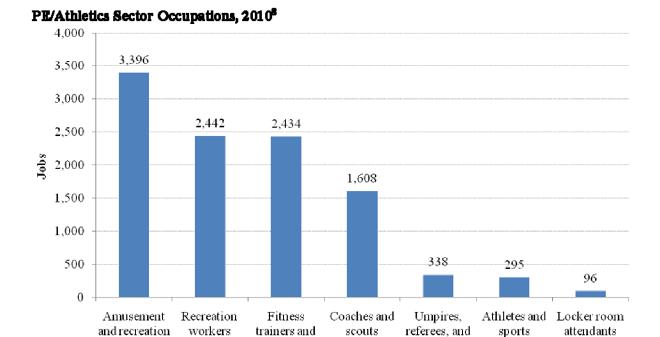
"...Health services helped me to understand how the different aspects of wellness interact and I'm a healthier person in all ways as a result of my classes.

# **Economic Impact**

attendants.

# **Kinesiology and Athletics Programs Boost Local Economies**

The collegiate model is not only valuable in terms of its educational function, but it also possesses substantial value to the *economic health* of the region as an *economic driver*. The Physical Education/Kinesiology and Intercollegiate athletics sector is a critical component of the Sacramento region's economy, contributing millions of dollars in economic activity each year (Center of Excellence, 2010). The sector has a direct impact on the economy by employing



thousands of people throughout the region. In addition, these establishments indirectly impact the economy through two key avenues: (1) PE/athletics establishments purchase a range of goods and service to support their daily operations; and, (2) the workforce consumes regionally available products. These purchases lead to job creation, economic activity in other industries throughout the region (Center of Excellence, 2010), and provide opportunities to form community partnerships. In addition, Kinesiology and Athletics programs enrich the social and cultural diversity of the region.

other sports

officials

competitors

aerobics.

instructors

Los Rios colleges' sports programs and their campus facilities are *economic magnets*. They reserve room nights at area hotels, fill up their vans/busses at local gasoline stations, visit local shopping malls, dine at area eateries, and access a variety of entertainment and business interests dedicated to their needs and contests. The physical space venues at all four Los Rios colleges represent a significant economic benefit to the Sacramento region. The following chart identifies the intercollegiate athletic hosted annually by Los Rios colleges.

Los Rios College	Venue	Seating Capacity	Number of Annual Events
American River	All purpose Stadium	5,000	24
American River	Spectator Gymnasium	3,000	45
American River	Main Theater	325	30
American River	Small Theater	150	30
American River	Other Venue's	1,200	15
Cosumnes River	All purpose Stadium	1,000	20
Cosumnes River	Spectator Gymnasium	1,380	40
Cosumnes River	Small Gymnasium	300	35
Cosumnes River	Recital Hall	310	130
Cosumnes River	Theater	170	115
Cosumnes River	Baseball Stadium	200	50
Cosumnes River	Softball Stadium	200	50
Cosumnes River	Soccer Complex (2	600	100
	fields)		
Cosumnes River	Other Venue's	1,000	100
Folsom Lake	# Visual and Performing	150-800	300-400
	Arts Center		
Folsom Lake	Lecture Hall	160	50
Folsom Lake	## Intercollegiate	200-1,000	80-110
	Athletic Fields		
Sacramento City	Hughes Stadium	20,000	20
Sacramento City	Union Stadium	1,225	45
Sacramento City	Auditorium	1,200	20
Sacramento City	Spectator Gymnasium	750	75
Sacramento City	Softball Stadium	800	50

<sup>#-</sup> Opening in spring 2011; The Center will be the largest and most unique in the region offering 80,000 square feet of state-of-the-art educational and entertainment space including an 800 seat main theatre, the 200 seat Studio theatre, a 100 seat recital hall, flexible Director's studio, actor's lab, recording studio, art gallery, rehearsal spaces, practice rooms and art lab space. The Center will deliver a full spectrum of educational services designed to instruct, develop and guide a variety of students, actors, musicians, vocalists, dancers, artists and performance technicians. Educational programs will also connect with professionals and organizations providing direct experience and career path opportunities for students. Additionally, the Center will provide the region with a significant venue in which to experience arts and culture on local, national and international levels.

<sup>## -</sup> Opening upon completion of facilities; Venue's include Baseball, stadium, Softball stadium, Soccer stadium, Tennis complex, Track and Field stadium, and Cross Country trail. Seating capacity ranges from 150 to 1,500.

The ability of the four colleges to sanction intercollegiate athletics *attracts* citizen supporters, student athletes, coaches, and support staff from other regions to Sacramento cannot be understated. To support the linkage between education and economic development, Table 2 (below) articulates the 2009-10 *economic* impact generated by Los Rios colleges in the Sacramento region annually. The data were collected based on sport contests hosted at the Los Rios colleges (*see Table 2*).

Table 2: Economic Impact of Hosting Intercollegiate Athletic Teams in 2009-10

Number of Days of Home Competition hosted by four Los Rios colleges:	354
Number of <i>Participating Teams hosted</i> during sport season by four Los Rios colleges:	656
Number of Student Athlete Participants hosted during sport season:	11, 965
Number of Coaches and Athletic Staff hosted during sport season home contests:	2,060
*Number of <i>Hotel Rooms Used by Teams</i> used by visiting teams:	1,397
*Total Number of Meals Consumed by visiting teams:	30,504
Estimated Total Attendance - All Days of Competition hosted by four Los Rios colleges:	117,935

*Note:* Using economic impact formula, the two rows identified with an asterisk (\*) are primary economic drivers. Estimates of these drivers are based on average hotel rates in the region and meal costs. Hotel rooms' unit amount was estimated at \$58 dollars per night and unit meal costs were estimated at \$6 per person. The 1,397 hotel room nights generated a minimum of \$81,026 in 2009-10 and meals generated \$183,024 for an *aggregated total of* \$264,050. The chart does not include other primary economic drivers such as transportation/fuel costs, shopping revenue, and related tourism fees generated by hosting sport teams in the region.

# **Job Creation**

This sector supports more than 23,900 jobs annually and generates \$1.8 billion in total economic activity annually. Over the next five years, the sector is expected to grow rapidly, potentially adding 1,800 new jobs and 1,500 replacement jobs. The current median wage for all occupations is \$20.27 per hour, compared to \$9.36 - \$17.59 per hour for other Physical Education/Athletics occupations (see Appendix A for list of occupations).

# **Community Partnerships**

The kinesiology and athletics programs at Los Rios have many innovative partnerships with both private and public agencies. These partnerships are mutually beneficial for the education of our students and for the support of our community.

# **Public-Private Partnerships**

Folsom Lake College and Sacramento City College have partnered with the American Council on Exercise (ACE) to offer quality programs in the fields of personal training and group fitness instruction, preparing students to sit for the national ACE Personal Trainer and Group Fitness Instructor Certification exams. Folsom Lake College and Sacramento City College are listed on ACE's website as University Curriculum Partners, providing wide ranging exposure to prospective students interested in these fields. This listing serves as a recruiting tool that brings students to our colleges, many of whom might otherwise not considered higher education as an option for them.

Folsom Lake College, the youngest college in the district, has grown rapidly and recently launched intercollegiate athletics, including men and women's golf and women and men's tennis. Two local for-profit entities, Spare Time Clubs (Broadstone Tennis and Racquet Club) and Club Corp (Empire Ranch Golf Course) partnered with the college to provide practice and match facilities for all four intercollegiate athletic teams. Spare Time Clubs and Club Corp wanted to contribute to the development of intercollegiate athletic teams at FLC. Both entities understood that partnering with FLC would create exposure for their clubs and assist them in accomplishing strategic branding and outreach goals. The college created a memorandum of understanding (MOU) with the Los Rios district and has reported positive increases in branding, marketing, and outreach for their entities as a result of the public-private partnership, both of which remain intact today.

Cosumnes River College and the Los Rios Community College District recently approved a joint use agreement with the Elk Grove Unified School District. The partnership resulted in stadium improvements, including synthetic turf, expanded bleachers, berm improvements, track removal, lighting improvement, and press box improvements. The 25-year agreement bundles investment commitments from both entities and is designed to increase the quality of experience for participating students, spectators, and maintenance/operations staff as well as increasing capacity of CRC to host more activities in the future.

# **Impact on Social and Cultural Diversity**

As highlighted earlier, the Los Rios colleges are cultural and social 'hubs' in their local communities. The colleges provide physical space and staff support for myriad cultural, economic, and social events. For example:

Sacramento City College hosted nearly 50,000 participants in dozens of events, including sports events, junior Olympics, and sport camps. Recently, Sacramento City College hosted a

National Collegiate Athletic Association (NCAA) Division 1-AA football game featuring two historically-black colleges located in the South and Southeast regions of the country. In 1996 and 2000, Sacramento City softball hosted the United States Olympic team and hosted the Japanese Olympic softball team for a series of scrimmages (as well as lodging, meals, and travel) in 2005.

One unique, *continuing* activity hosted by Sacramento City College (SCC) merits highlighting (as told by SCC PE department chair helping to coordinate the three-week exchange program):

"... The Japanese group was a cultural exchange program between California Colleges and Japanese Colleges. I started working with it in 1987 and took my first trip in 1988. It was a great cultural and athletic event. Many of the wrestlers from Sacramento City College participated in the exchange, but it also included schools such at American River College, Sierra College, Skyline College, East Los Angeles College, West Valley College, Moorpark College, San Francisco State University, UC Davis and other colleges as well. The two countries would alternate the tours by traveling to the other's country every other year. Our student athletes returned to SCC with much knowledge about Japan and its culture, as well as, better wrestling knowledge. The friendships they made are lifetime friendships. When the Japanese came here, it gave us a better idea of the Japanese people as well. It also taught us about giving of our time, and in some cases money, to help another group experience the culture in California and the USA."

Cosumnes River College hosted a nearly equal number of activities, many of which are viewed as important cultural assets to the region, including the Meadowview Jazz Festival, Asian Basketball league, swim teams, and karate tournaments. Collectively, nearly 20,000 individuals benefitted from participating in the CRC-hosted events.

Folsom Lake College, has hosted a variety of cultural events, including, 'Evening of Dance,' which attracts visiting companies performing a variety of ethnic dance styles such as *Ballet Folklorico* and *Bollywood*. This performance alone attracts hundreds of local residents. The college has also hosted nearly one dozen guest scholars addressing current issues such as climate change and nanotechnology. All of the events were free to area citizenry to attend.

# Cost Savings and Enhanced Global Competitiveness Kinesiology and Athletics Programs Reduce Costs to Communities

Kinesiology and athletics programs not only generate revenue for a region, but reduce costs to communities. Obesity has reached epidemic proportions in the United States with two-thirds of the adult population classified as obese or overweight (Trust for America's Health, 2010). Data from the Centers for Disease Control (2009) indicate that California's obesity rates have risen from less than 10% of the population in 1985 to 24.8% in 2009. Mississippi currently has the highest rate of obesity with 32.3% of adults classified as inactive (Trust for America's Health, 2010). Higher rates of obesity come with higher rates of obesity-related diseases such as diabetes, hypertension, and heart disease.

Obesity related medical costs account for 10% of all annual medical costs (Trust for America's Health, 2010). The poor physical condition of America's workforce is hampering our ability to compete in the global economy. Communities with the highest rates of obesity are unattractive to business investors due to inherent increased employee health care costs and decreased productivity. The following is a sample of codified research reports reviewed in preparing this report:

- Job absenteeism related to obesity costs 4.3 billion annually (Cawley, Rizzo, & Haas, 2007).
- Obese workers have higher workman's compensation claims (Trust for America's Health, 2010).
- The number of sick days, health care costs, and medical claims increase as a function of body mass index (BMI) (Burton, Chen, Schultz, & Edington, 1998; Wang, McDonald, Champagne, & Edington, 2004).
- Obese workers are less productive while at work costing \$506 per obese employee per year (Gates, Succop & Brehm, 2008).
- Obese workers incur over \$51,000 in medical claims per 100 like employees as compared to \$7,500 per 100 healthy weight cohorts (Trust for America's Health, 2010).
- Overweight, obesity and inactivity are estimated to cost the State of California over \$41 million per year (Chenoweth & Associates, 2009).

# **Kinesiology and Athletics Programs Support National Security**

A recent study showed that 75% of young Americans aged 17 - 24 years are unable to join the military because they are either physically unfit, failed to graduate from high school, or have a criminal record (Mission: Readiness, 2010). The retired military leaders' research showed that 27% of 17 - 24 year old prospective recruits are too obese to join the military. This percentage represents nine million young Americans. Of those who do succeed in being recruited, 15,000 do not pass their entrance physicals.

# **Efforts by Lawmakers and National Organizations to Support Fitness**

While some state lawmakers hope to balance the budget by reducing funding for physical education, kinesiology and athletics programs, others have decided to experience the benefits of such programs for themselves (Pettus, 2010). In the state of Mississippi, 70 lawmakers and 19 members of the governor's staff meet regularly each week at a small college gym to work out. The group has been motivated by cash prizes awarded to weight loss winners which will be donated to local schools of their choice. Collectively they have lost 1,300 pounds in six months.

Nationally, the Centers for Disease Control (CDC) granted \$300,000 to the University of South Carolina's Prevention Research Center to develop strategies for a national physical activity plan in September 2007 (Trust for America's Health, 2010). This plan was developed through a public-private partnership in a collaborative effort to create policies, programs, and initiatives that would increase physical activity across all segments of the American population (National Physical Activity Plan, 2010). Partners included: education, transportation, mass media, health care, non-profit, and volunteer organizations, parks and recreation, the fitness industry, community planners, business, and industry. The Education segment of the plan outlines six strategies for increasing physical activity, with strategies two strategies calling upon post-secondary educational institutions to "encourage post-secondary institutions to incorporate population-focused physical activity promotion training in a range of disciplinary degree and certificate programs" (National Physical Activity Plan, 2010 p. 13).

The Center for Study of Sport in Society, a Northeastern University center, announced the release of "Embracing the Power of Sport and Culture: An Opportunity to Effect Change at the Sport-Culture-Government Intersection" (Center for Study in Sport in Society, 2010). This effort is a call to action recommendation to President Barack Obama that the United States formally promote sport and culture in government. It was designed to foster a broader discussion about the role of sport and culture in government at this critical, momentous time in U.S. history. This could help the United States harness the power of sport and culture to effect change on many issues President Obama champions, including: health and fitness, social inclusion, human rights, and diplomacy. The call to action advocates for individuals, schools and institutions in the United States to utilize the power of sport, music, dance, and other cultural agents of empowerment and human development. Specific potential actions or manifestations include: the creation of a secretary or special advisor for sport and culture, increased attention to and funding for existing programs, or further investigation into potential opportunities to enhance the sport-culture-government intersection.

### The Patient Protection and Affordable Care Act of 2010

The recent healthcare legislation not only seeks to provide health care services to all Americans, but a significant portion of the funding is directed toward obesity prevention efforts including: \$500 million allocation for the 2010 fiscal year, increasing to \$2 billion annually by 2015 for the Prevention and Public Health Fund to support wellness, prevention and public health activities (Trust for America's Health, 2010).

# American Reinvestment and Recovery Act of 2009 (ARRA)

The federal government has allocated \$120 million to 50 states to support communities and schools in an educational media campaign and to increase access to healthy foods and safe places to engage in physical activity (U.S.D.H.H.S., 2010). An additional \$373 million was allocated to support 44 communities in addressing obesity, increasing physical activity, and reducing smoking and tobacco use.

# Putting Prevention to Work Program

The Center for Disease Control (CDC) recognizes the obesity crisis and the economic and workforce impact to our nation. As such the 2010 appropriations and programs include:

- Nearly \$45,000,000 allocated to the Division of Nutritional, Physical Activity and Obesity (NPAO) - state grants for designing, implementing and evaluating health programs aimed at increasing healthy food intake and increasing physical activity. (Trust for America's Health, 2010)
- \$13.6 million to the Division of Adolescent and School's Health Coordinated School Health Program to follow a cohort of 5<sup>th</sup> graders until age 20 to increase understanding of factors contributing to health. (Trust for America's Health, 2010)
- Nearly \$23 million to the Healthy Communities program for community based obesity prevention programs (Trust for America's Health, 2010)
- Nearly \$40 million to the REACH program designed to reduce racial and ethnic disparities in disease incidence rates (Trust for America's Health, 2010)
- \$230 million to Communities Putting Prevention to Work (CPPW) Obesity Grants to Communities aimed at development of state and local policy designed to reduce obesity (US Centers for Disease Control and Prevention, 2010).

Thus the disciplines of Kinesiology and Athletics are uniquely poised to save our country billions of dollars in obesity related workman's compensation and health care costs. Keeping our community members fit will also help us remain competitive in the global marketplace and is vital to our national security.

# A closing comment on activity classes

Recently, a local newspaper published a story probing activity-related classes offered by community colleges in the region. The reporter cited that local citizenry find value in the courses. Subsequent to the story, guidance was provided to community colleges that altered the 'lifelong learning' prong as enacted by the 1961 California Master Plan for Higher Education.

Given the continuing budget strife facing California, all Los Rios colleges responded to the mission-transition request from the California Community Colleges Chancellor's Office and removed various personal activity classes from their offerings. Numerous community individuals, and in some instances, community groups have expressed displeasure that their local community college is not providing them with lifelong learning options of interest to them. However, the colleges continue to respond to state mandates and are offering few, if any, personal activity classes presently. As it relates to the numbers of students taking only personal activity classes, consider the following:

A data base query performed by Cosumnes River College in fall 2010 revealed that approximately <u>10 (ten)</u> students from a study body of approximately <u>15,000</u> students enrolled only in a personal activity class in fall 2010 without registering for additional classes that semester.

# Appendix A

Physical Education and Athletics Economic and Employment Impact Summary Report

# Introduction

The Physical Education and Athletics Sector (PE/Athletics) is a critical component of the Sacramento Region's economy, contributing millions of dollars in economic activity every year. PE/Athletics establishments – sports teams, golf courses, promotion agencies, etc. – have a direct impact on the economy by employing thousands of people throughout the region. In addition, these establishments indirectly impact the economy through two key avenues: (1) PE/Athletics establishments purchase a range of goods and services to support their daily operations and (2) the PE/Athletics workforce consumes regionally available products. These purchases lead to job creation and economic activity in other industries throughout the region. Overall, this increases the total economic activity in the region.

The purpose of this research brief is to highlight the economic importance of the PE/Athletics sector in the Sacramento region by assessing the value of the economic activity and employment.<sup>1</sup> In addition, the brief provides an overview of the sector's labor market trends.

# **PE/Athletics Sector Definition**

The PE/Athletics sector includes establishments that offer fitness, recreation and spectator activities. Below are the NAICS codes that represent this sector as defined by the Los Rios PE/Athletics Task Force. More information about each industry in the sector may be found at <a href="http://www.census.gov/eos/www/naics/">http://www.census.gov/eos/www/naics/</a>.

Table 1: Major Industry Groups of the PE/Athletics Sector

Tuble 1. Major maust	Ty Groups of the Leatmetics Section
Major Group	NAICS Code
Sports Teams,	711211 Sports Teams and Clubs
Racetracks, and Other	711212 Racetracks
Spectator Sports	711219 Other Spectator Sports
Promoters and Agents	711310 Promoters of Performing Arts, Sports, and Similar Events with Facilities
	711320 Promoters of Performing Arts, Sports, and Similar Events without Facilities
	711410 Agents and Managers for Artists, Athletes, Entertainers, and Other Public
	Figures
Golf Courses, Skiing	713910 Golf Courses and Country Clubs
Facilities, and Other	713920 Skiing Facilities
Recreation Industries	713930 Marinas
	713950 Bowling Centers
	713110 Amusement and Theme Parks
	713990 All Other Amusement and Recreation Industries
Fitness and recreational	713940 Fitness and recreational sports centers
sports centers	

<sup>&</sup>lt;sup>1</sup> The Sacramento Region includes Sacramento, El Dorado, Placer, Sutter, Yolo and Yuba Counties.

# **Economic Impact Findings**

The PE/Athletics sector had a \$1.8 billion economic impact on the Sacramento Region in 2008. There are three levels of impact, as illustrated in Figure 1 below. At the basic level, the sector contributes to the economy through delivery of services, which generates a substantial portion of the region's total payroll. Second, PE/Athletics establishments purchase goods and services from businesses outside the sector in order to provide PE/Athletics services. For example, these establishments lease buildings, contract with accounting services, and purchase food and beverages, among other goods and services that are necessary to properly operate. Third, the wages paid to sector employees generates household purchases in the region (employee spending).

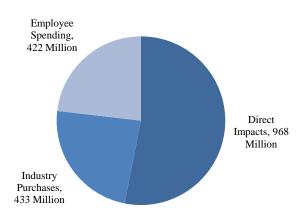


Figure 1: Annual Economic Impact, 2008<sup>2</sup>

Table 2 displays the economic impact by the major industry groups. Fifty percent of the total economic activity was generated by the Golf Courses, Skiing Facilities, and Other Recreation Industries group, followed by Fitness and Recreational Sports Centers with 19 percent, Sports Teams, Racetracks, and Other Spectator Sports with 18 percent, and Promoters/Agents with 13 percent. This table also highlights that significant impact that the PE/Athletics Sector generates in other industries. Almost half (47 percent) of all the economic activity generated by the PE/Athletics Sector is a result of industry purchases and employee spending.

Table 2: PE/Athletics Economic Impact by Major Industry Group<sup>3</sup>

Table 2: 1 Littlineties Leonomic impact by Major Madstry Group						
Industry Description	Direct Impacts	Industry Purchases	Employee Spending	Total		
Sports Teams, Racetracks, and Other Spectator						
Sports	164,264,736	47,881,749	124,638,298	336,784,783		
Promoters and Agents	118,176,888	63,332,700	58,446,744	239,956,332		
Golf Courses, Skiing Facilities, and Other						
Recreation Industries	502,383,269	241,224,177	159,434,915	903,042,360		
Fitness and recreational sports centers	183,704,864	80,424,236	79,632,246	343,761,346		
Total Impact	968,529,757	432,862,862	422,152,203	1,823,544,822		

<sup>&</sup>lt;sup>2</sup> Center of Excellence, data from IMPLAN Professional Input-Output Model and EMSI.

<sup>&</sup>lt;sup>3</sup> The industry group, Promoters and Agents, includes NAICS codes 711310, 711320, 711410, which represents both PE/Athletics and Fine/Performing Arts employment.

The PE/Athletics Sector supports nearly 24,000 jobs in the Sacramento Region. In addition to the value of economic activity generated by the PE/Athletics sector, it creates a significant number of jobs in the region. First, PE/Athletics establishments directly employ workers, generating the highest portion of total jobs supported by the sector (Direct Impact). Second, these employers generate jobs in other sectors as a result of business-to-business relationships (Industry Purchases) and household spending in other sectors (Employee Spending).

As shown in Figure 2 & Table 3, the majority of jobs supported by the PE/Athletics Sector fall within the direct impacts category, generated primarily by the Golf Courses, Skiing Facilities, and Other Recreation Industries, and Fitness and Recreational Sports Centers.

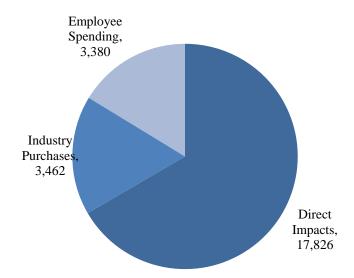


Figure 2: Annual Employment Impact, 2008<sup>4</sup>

Table 3: PE/Athletics Employment Impact by Major Industry Group

Industry Description	Direct Impacts	Industry Purchases	Employee Spending	Total
Sports Teams, Racetracks, and Other Spectator	Impacts	1 ul chases	Spending	Total
Sports Fearing, Racetracks, and other spectator	2,906	483	997	4,164
Promoters and Agents				
	1,894	603	468	2,861
Golf Courses, Skiing Facilities, and Other				
Recreation Industries	6,374	1,811	1,276	9,461
Fitness and recreational sports centers	6,652	566	638	7,456
Total Impact	17,826	3,462	3,380	23,942

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<sup>&</sup>lt;sup>4</sup> Center of Excellence, data from IMPLAN Professional Input-Output Model and EMSI.

# **Labor Market Trends**

Figure 3 displays the historic and projected growth in the Sacramento Region. As with many industries, the PE/Athletics sector lost several hundred jobs in the last few years due to the recession. However, over the next five years (2010-15), the PE/Athletics sector is expected to grow steadily, adding about 2,400 jobs (14 percent).

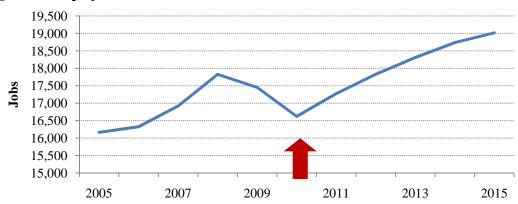


Figure 3: Employment Growth in the PE/Athletics Sector<sup>5</sup>

Table 4: 2010-15 Employment Projections, Establishments & Earnings per Worker (EPW)5<sup>&6</sup>

NAIC	1 1	•		<u> </u>	%	Current	Bus.
S Code	Description	2010	2015	Change	Change	EPW	Count
711211	Sports Teams and Clubs	1,231	1,638	407	33%	\$109,136	24
711212	Racetracks	169	172	3	2%	\$20,802	6
711219	Other Spectator Sports	1,428	1,742	314	22%	\$9,442	16
711310	Promoters of Performing Arts,						
	Sports, and Similar Events with						
	Facilities	1,004	1,036	32	3%	\$16,080	21
711320	Promoters of Performing Arts,						
	Sports, and Similar Events						
	without Facilities	380	418	38	10%	\$36,740	9
711410	Agents and Managers for Artists,						
	Athletes, Entertainers, and Other						
	Public Figures	324	353	29	9%	\$22,108	7
713910	Golf Courses and Country Clubs	1,846	2,080	234	13%	\$25,264	62
713920	Skiing Facilities	1,308	1,072	(236)	(18%)	\$21,153	11_
713930	Marinas	391	431	40	10%	\$33,980	30
713950	Bowling Centers	453	463	10	2%	\$16,437	16
713990	All Other Amusement and						
	Recreation Industries	1,783	2,078	295	17%	\$14,449	123
713110	Amusement and Theme Parks	63	35	(28)	(82%)	\$32,398	2
713940	Fitness and Recreational Sports						
	Centers	6,241	7,499	1,258	20%	\$12,078	221
	Total	16,621	19,017	2,396	14%		548

<sup>&</sup>lt;sup>5</sup> EMSI Complete Employment - 3rd Quarter 2010

<sup>&</sup>lt;sup>6</sup> Earnings per worker includes all wages, salaries, profits, benefits, and other compensation divided by the number of jobs in the industry

# **Occupation Analysis**

Amusement and recreation attendant is the largest occupation in the PE/Athletics sector, employing nearly 3,400 workers in the Sacramento Region. Amusement and recreation attendants are responsible for scheduling the use of recreation facilities, maintaining and providing equipment to participants of sporting events or recreational pursuits, or operating amusement concessions and rides.<sup>7</sup>

Recreation workers and fitness trainers/aerobics instructors are the second and third largest occupations in the PE/Athletics Sector. Recreation workers organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and/or hobbies, taking into account the needs and interests of individual members. Fitness trainers/aerobics instructors represent two categories, those that provide one-to-one instruction to help individuals meet their fitness goals (i.e. personal trainers) and those that provide group aerobic exercise, stretching, and muscle conditioning instruction (i.e. group exercise instructors).

Also of significant size is the coach/scout occupation. Coaches and scouts manage and recruit new players to sport teams, and often hold a specialized degree in their sport of instruction. O\*NET projects a bright outlook for all of these occupations over the next few years. In addition to the core PE/Athletics occupations listed below, this sector also employs thousands of individuals that help run the business, such as accountants, ground keepers, sales managers, etc.

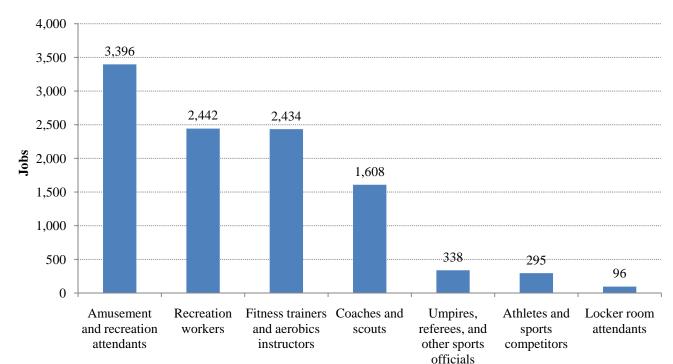


Figure 3: PE/Athletics Sector Occupations, 2010<sup>8</sup>

<sup>&</sup>lt;sup>7</sup> ONET occupational descriptions, http://online.onetcenter.org/

<sup>&</sup>lt;sup>8</sup> EMSI Complete Employment - 3rd Quarter 2010

Table 5 displays the total number of openings by occupation over the next five years, including new jobs and replacement jobs. The amusement and recreation attendant occupation will have the most job openings, followed by fitness trainers and aerobics instructors, and recreation workers. Annually, the PE/Athletics sector will need to fill 680 core positions each year to operate effectively.

Table 5: 2010-15 Employment Change by Occupation

SOC Code	Description	2010 Jobs	2015 Jobs	New Jobs	Repl. Jobs	Total Openings	% Total Openings
27-2021	Athletes and sports competitors	295	345	50	29	79	27%
27-2022	Coaches and scouts	1,608	1,912	304	154	458	28%
27-2023	Umpires, referees, and other sports officials	338	394	56	33	89	26%
39-3091	Amusement and recreation attendants	3,396	3,841	445	894	1,339	39%
39-3093	Locker room, coatroom, and dressing room attendants	96	111	15	25	40	42%
39-9031	Fitness trainers and aerobics instructors	2,434	2,992	558	219	777	32%
39-9032	Recreation workers	2,442	2,841	399	219	618	25%
	Total	10,608	12,436	1828	1572	3400	32%

As shown in Table 6, all of the core PE/Athletics occupations, except for fitness trainers and aerobics instructors, require on-the-job training. However, a postsecondary award may give an applicant a competitive advantage in the hiring process. Fitness trainers and aerobics instructors are the highest paid occupation with median hourly earnings of \$17.60 per hour.

**Table 6: PE/Athletics Occupations Earnings & Education Level** 

SOC		Pct 25 Hourly Earning	Median Hourly Earning	Pct 75 Hourly Earning	Pct 90 Hourly Earning	
Code	Description	S	S	S	S	Education Level
27-2021	Athletes and sports					Long-term on-the-job
	competitors	\$13.18	\$16.43	\$21.52	\$29.24	training
27-2022	Coaches and scouts					Long-term on-the-job
		\$13.11	\$16.47	\$25.99	\$36.63	training
27-2023	Umpires, referees, and					Long-term on-the-job
	other sports officials	\$9.11	\$9.60	\$11.87	\$17.36	training
39-3091	Amusement and recreation					Short-term on-the-job
	attendants	\$8.93	\$9.36	\$10.07	\$12.09	training
39-3093	Locker room, coatroom,					
	and dressing room					Short-term on-the-job
	attendants	\$9.18	\$10.04	\$12.76	\$16.26	training
39-9031	Fitness trainers and					Postsecondary vocational
	aerobics instructors	\$12.32	\$17.59	\$21.00	\$25.00	award
39-9032	Recreation workers					Short-term on-the-job
		\$8.97	\$10.14	\$12.41	\$16.02	training

# **Summary**

The PE/Athletics sector is critical to the Sacramento Economy, contributing millions of dollars in economic activity every year. This sector creates wealth in the region by employing thousands of people that purchase goods and services and through the generation of business-to-business spending. The PE/Athletics sector adds value to the Sacramento Regional economy by:

- Supporting more than 23,900 jobs annually
- Generating \$1.8 billion in total economic activity annually

Over the next five years, the sector is expected to grow rapidly, potentially adding 1,800 new jobs and 1,500 replacement jobs. However, one of the challenges facing the sector is that wages are relatively low when compared to the regional average. The current median wage for all occupations in the Sacramento region is \$20.27 per hour, compared to \$9.36 - \$17.59 for core PE/Athletic occupations.

### **About the Centers of Excellence**

The Center of Excellence (COE), in partnership with business and industry, delivers regional workforce research customized for community college and workforce system decision making and resource development. The Northern California COE is one of five regional Centers of Excellence supported by the Chancellor's Office of the California Community Colleges and is tasked with conducting environmental scanning, partnership development and technical assistance activities.

The COE's research team represents expertise in labor market analysis, labor-management partnership projects, project management, and primary research. COE staff is experienced researchers with a focus on research design, partnership development, educational and training program mapping, and identifying skill sets for emerging occupations as well as key skill sets and geospatial analysis.

The COE maintains strategic alliances with research organizations whose relationships and technical expertise enhance COE's research efforts. These alliances enable COE to access information from over 80 public databases through the use of EMSI economic modeling software, GIS technology via the use of customized geo-mapping software that ties industry codes (NAICS) to a private business database of over 1 million business records. The COE maintains robust partnerships with industry associations that assist in validating research findings, ensuring that the most recent industry and labor market conditions are captured.

COE studies are used to inform policy discussions, industry-wide legislative efforts, and regional workforce development strategies, as well as guide program and resource development efforts by the California Community Colleges. These reports can be accessed at **www.coeccc.net**.



# References

- Burton, W.M., Chen, C.Y., Schultz, A.B. & Edington, D.W. (1998). The economic costs associated with body mass index in a workplace. *Journal of Occupational and Environmental Medicine* 40(9), 786-792. Retrieved August 11, 2010 from OvidSP database.
- Cawley, J., Rizzo, J.A., & Hass, K. (2007). Occupation-specific absenteeism costs associated with obesity and morbid obesity. *Journal of Occupational and Environmental Medicine* 49(12), 1317-1324. Retrieved August 11, 2010 from OvidSP database.
- Chenoweth & Associates (2009). The economic costs of overweight, obesity, and physical inactivity among California adults -- 2006. Oakland, CA: The California Center for Public Health Advocacy. Retrieved August 11, 2010 from <a href="http://www.publichealthadvocacy.org/costofobesity.html">http://www.publichealthadvocacy.org/costofobesity.html</a>
- Center for Study of Sport in Society (2010). Sport in society sends call to action to President

  Obama. Sport in Society, a Northeastern University Center. Retrieved August 11, 2010

  from

  <a href="http://www.northeastern.edu/sportinsociety/research/published/Research\_Initiatives/1.">http://www.northeastern.edu/sportinsociety/research/published/Research\_Initiatives/1.</a>

  html
- Center for Disease Control (2009). U.S. Obesity Trends. Retrieved September 24, 2010 from: <a href="http://www.cdc.gov/obesity/data/trends.html#State">http://www.cdc.gov/obesity/data/trends.html#State</a>

- Coakley, J.J. (1998). *Sport in society: Issues and controversies* (5<sup>th</sup> ed.). Boston: McGraw-Hill.
- Cohen, G. (2001). *Women in sport: Issues and controversies* (2nd ed.). AAHPERD Publications, Oxon Hill, MD.
- Employment Development Department, Sacramento Metropolitan Statistical Area Labor

  Market Information Division, State of California. Retrieved September 13, 2010 from <a href="https://www.edd.ca.gov">www.edd.ca.gov</a>.
- Fox, C.K., Barr-Anderson, D., Neumark-Sztainer, D., & Wall, M. (2010). Physical activity and sports team participation: Associations with academic outcomes in middle school and high school students. *The Journal of School Health*, 80(1), 31-37. Retrieved August 5, 2010 from WilsonWeb database.
- Fylpaa, J. (2010). What is the value of physical education and athletics? California

  Community College Physical Educators Association. Retrieved August 5, 2010 from

  jfylpaa@lbcc.edu
- Gates, D., Succop, P., Brehm, B. et al. (2008). Obesity and presenteeism: The impact of body mass index on workplace productivity. *Journal of Occupational and Environmental Medicine*, 50(1), 39-45. Retrieved August 11, 2010 from Ovid SP database.
- Gazzaniga, M. (2008). Learning, Arts, and the Brain: The Dana Consortium Report on Arts and Cognition. Editors Asbury, C. & Rich, C. New York: Dana Press. Retrieved August 7, 2010 from

- http://www.dana.org/uploadedFiles/News\_and\_
- <u>Publications/Special\_Publications/Learning,%20Arts%20and%20the%20Brain\_ArtsA</u> ndCognition\_Compl.pdf
- Geier, A.B., Foster, G.D., Womble, L.G., McLaughlin, J., Borradaile, K.E., Nachmani, J., Sherman, S., Kumanyika, S., & Shults, J. (2007). The relationship between relative weight and school attendance among elementary schoolchildren. *Obesity*, *15*(8), 2157-2161. Retrieved August 8, 2010 from EBSCOhost database.
- Harbison, P. (2010). Game Changer. Journal of the Faculty Association of California Community Colleges, Summer 2010, Sacramento: FACCC.
- Harrell, K. (2010). The Case for Physical Education and Athletics. Name of university, class.
- Inside Higher Ed (2010). A quickly growing major. August 16, 2010. Retrieved August 14, 2010 from www.insidehighered.com.
- Jensen, E.P. (2009). A fresh look at brain-based education. Kappan Magazine. Phi Delta Kappa International, Bloomington, IN. Retrieved August 6, 2010 from <a href="http://www.pdkintl.org/kappan/k\_v89/k0802jen.htm">http://www.pdkintl.org/kappan/k\_v89/k0802jen.htm</a>
- Keihn, D. (1997). Balancing Academics and Athletics. It's not an impossible task. NCAA News, Vol. 1(23). Retrieved November 11, 1997, from NCAA Weekly News.
- Knight Foundation (1991). Keeping faith with the student-athlete: A new model for intercollegiate athletics. Report of the Knight Foundation Commission on Intercollegiate Athletics, March 1991.

- Lavey, R., Sherman, T., Mueser, K.T., Osborne, D.D., Currier, M., & Wolfe, R. (2005). The effects of yoga on mood in psychiatric inpatients. *Psychiatric Rehabilitation Journal*, 28(4), 399-402. Retrieved August 8, 2010 from ProQuest 5000 database.
- Mission: Readiness (2010). Too fat to fight. Retrieved August 11, 2010 from http://cdn.missionreadiness.org/MR\_Too\_Fat\_to\_Fight-1.pdf
- National Physical Activity Plan. Columbia, SC: University of South Carolina, 2010. Retrieved

  August 11, 2010 from

  <a href="http://www.physicalactivityplan.org/NationalPhysicalActivityPlan.pdf">http://www.physicalactivityplan.org/NationalPhysicalActivityPlan.pdf</a>.
- Netz, Y. & Lidor, R. (2003). Mood alterations in mindful versus aerobic exercise modes. *The Journal of Psychology*, *137*(5), 405-419. Retrieved August 8, 2010 from ABI/INFORM Global database.
- Pettus, E.W. "Fattest State's Lawmakers Shed Pounds, Fried Stuff." *The Associated Press*, March 24, 2010. Retrieved August 11, 2010 from <a href="http://abcnews.go.com/US/wireStory?id=10186801">http://abcnews.go.com/US/wireStory?id=10186801</a>
- The California Community Colleges System Strategic Plan Steering Committee (2006).

  California Community Colleges System Strategic Plan: Education and the Economy –

  Shaping California's Future Today. Presented January 17, 2006, to the California

  Community Colleges Board of Governors, Sacramento, CA.

- Trost, S.G. (2007). "Active education": Physical education, physical activity, and academic performance. San Diego, CA: Active Living Research. Retrieved August 7, 2010 from <a href="http://www.activelivingresearch.org/files/Active\_Ed.pdf">http://www.activelivingresearch.org/files/Active\_Ed.pdf</a>
- Trust for America's Health (2010). Obesity 2010 Report. F as in Fat: How Obesity Threatens

  America's Future. Retrieved August 11, 2010 from

  <a href="http://healthyamericans.org/reports/obesity2010/">http://healthyamericans.org/reports/obesity2010/</a>
- U.S. Department of Health and Human Services (2010). More than \$119 million awarded to states and territories. News Release, February 5, 2010. Retrieved August 11, 2010 from <a href="http://www.hhs.gov/news/press/2010pres/02/20100205a.html">http://www.hhs.gov/news/press/2010pres/02/20100205a.html</a>.
- U.S. Department of Health and Human Services. HHS Awards \$372 million in prevention and wellness grants to 44 communities around the nation. March 19, 2010. Retrieved August 11, 2010 from <a href="http://www.hhs.gov/news/press/2010pres/03/20100319a.html">http://www.hhs.gov/news/press/2010pres/03/20100319a.html</a>
- Van Horn, S. (2009). College considerations and planning requirements for implementation of intercollegiate athletics: An institutional guidebook. Presented to Palo VerdeCommunity College District Board of Trustees, March 2009.
- Wang, F., McDonald, T., Champagne, L.J., & Edington, D.W. (2004). Relationship of body mass index and physical activity to health care costs among employees. *Journal of Occupational and Environmental Medicine*, 46(5), 428-436. Retrieved August 11, 2010 from OvidSP database.

Woolery, A., Myers, H., Sternlieb, B. & Zeltzer, L. (2004). A yoga intervention for young adults with elevated symptoms of depression. *Alternative Therapies in Health and Medicine*, 10(2), 60-63. Retrieved August 8, 2010 from ProQuest 5000 database.

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