

HIGH DESERT MASTER PLAN
FOR
HIGHER EDUCATION

BY

THE ANTELOPE VALLEY BOARD OF TRADE

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EXECUTIVE SUMMARY

The effort to establish a four-year polytechnic university in the High Desert region of Southern California was prompted by the perception that the technical industry of the region cannot hire a sufficient number of engineers and technicians. To begin to address this issue, the Cal Poly High Desert Master Planning Committee created the following mission statement:

“Develop a highly educated, diversified, state-of-the-art workforce by establishing a polytechnic university to meet local, state and global economic needs through the unique resources, research capabilities and attributes of the High Desert region.”

This Master Plan specifies that the following five crucial elements will be implemented at the new four-year polytechnic university to be located in the High Desert region of southern California.

1. The design of the university will include a comprehensive academic program which addresses current and future technological needs of the community and industry of the High Desert region and the planet.
2. The university academic programs and infrastructure will use the attributes of the High Desert to the fullest extent.
3. A long term, flexible plan for academic and campus infrastructure growth is essential.
4. It is critical that the campus be placed in a central location in the High Desert with plenty of room to grow.
5. The university must be financially accessible to people inside and outside of the High Desert region.

A new four-year polytechnic university needs to be built in the High Desert region of Southern California to address the need for engineers, medical and other technical professionals. The precedent set by technology testing in the High Desert, the abundance of technological industries, the physical attributes of the region and the projected student population growth of the area more than justify the establishment of this new university. Currently, there is a combined 13,525 **full-time equivalent students** between California State University, Bakersfield-Antelope Valley, Antelope Valley Community College and Cerro Coso Community College.

This new High Desert University would provide quality, access, and affordability to California students seeking a college education to meet the needs of California’s rapid growth and diverse population. It would also anticipate the need and provide the solutions in an affordable means and stimulate economic and technical growth in emerging areas of education, commerce and technology.

STATEMENT OF NEED

NEED FOR A UNIVERSITY

A new, diverse and affordable four year polytechnic university in the High Desert would play a vital role in the growth and development of California's economy. This new state polytechnic university would provide high-quality, accessible, affordable, student-focused education for those who will make a difference in the technical work force and the future of California. The need for a comprehensive university in the High Desert is evidenced by all of the higher education facilities, shown in Appendix A, trying to meet this need.

Mounting concerns over filling vacant positions are being felt throughout the Region. Critical areas of need are for trained and licensed healthcare workers, and trained and credentialed educators. Registered Nurses (RN), Respiratory Therapists, Pharmacists, Clinical Social Workers, Medical Technologists/Clinical Lab Scientists, Physical Therapists, Radiology Technicians and Clinical Dieticians are just a few of the difficult-to-recruit positions within the healthcare industry. A University of California, San Francisco (UCSF) study forecasts a statewide shortage of 89,314 RNs by 2030.¹

The following regional attributes provide an opportunity for synergy among the needs of industry, community and students: the new Costco solarization, power generation at the Kramer Junction solar plant; wind derived power from wind farms and multi-Kw stand-alone towers; spacecraft, aircraft, emerging uninhabited aerial vehicle (UAV) technologies; rail for passengers and freight, high speed rail or bullet train for long distant travel; roadway infrastructure ranging from interstate freeways to increasing traffic loads on local roadways. The computer / software technical area is supported by emerging and special needs for the aerospace industry and other emerging opportunities in communication and education.

NEED FOR A POLYTECHNIC UNIVERSITY

California reaps more rewards from mining than any other state in the nation. Sand and gravel, cement, borates, limestone, and gold make up 90 per cent of the State's industrial mineral value, and they are all found in the High Desert. California is the only state to produce boron, and almost 100 per cent of that comes from the Rio Tinto Borax open-pit mine in Boron. However, the mine has a shortage of engineers and skilled technicians to perform the mining operations. According to the company, only one school in the nation offers a mining curriculum and that school is located in the Midwest.

Kern County needs a full engineering program in electrical / electronic engineering, and larger programs in computer and software engineering. Other technology-focused university programs would also be helpful in biology and bioengineering. The county can, and should, look to expand its technology operations and steer to a future as a high technology center."² The emerging space tourism industry born in the High Desert region will put further demands on the need for engineering and highly skilled technicians.

¹ Leighty, (2006, October 9). John. Expanding educational capacity to combat a worsening shortage. Nurse Week.

² Wadley-Donovan. [YEAR.] Group labor market assessment in Kern County. Kern Economic Journal, Vol. 4, Issue 2.

It has been estimated that an additional 100 civil engineers will be needed for every 200,000 increase in population. Based on this estimate and the projected population for the High Desert, the local university would have to graduate 95 civil engineers a year until the year 2030 to meet the demand.

Additionally, international organizations like Hyundai and Honda automotive research and testing facilities bring high technology industry to East Kern County, but at the same time are having difficulty hiring the skilled workforce required in the automotive industry.

There is also an area-wide shortage of math, science, and English teachers and school administrators. A detailed list of the skill sets required by business and industry today and unmet in the region is contained in Appendix B.

For 15 years, the Career Prep Council, a local partnership of schools, businesses, and government agencies, has worked regionally to improve career preparation of students from elementary, high school and post secondary schools for the workforce. The Antelope Valley Joint Union High School District (AVJUHS) has six approved career academies and many career pathways, and works to integrate these with local elementary and middle schools, as well as the Antelope Valley Community College.

In January 2002, the Career Prep Council formed a new Math, Science, Engineering, and Technology Consortium (MSET) focused on preparing more students for these related careers. The Consortium has representatives from academia, industry, business, and government, providing a representative cross section of the region. The MSET has been working with AVHSD, Antelope Valley College, California State University, Bakersfield-AV and California State University, Fresno-AV to develop and expand a local engineering degree program to meet the needs of industry.

While investigating the shortfall of engineers and skilled technicians in the Aerospace Valley, MSET members learned:

- Engineers hired from outside the High Desert region did not readily adapt to the desert environment and did not stay.
- Local students that left the area to get an engineering degree seldom returned because they were offered employment in other areas.

Local students that did return with an engineering degree provided stability to the workforce.

GROW OUR OWN ENGINEERS

The answer seemed to be to “Grow Our Own Engineers”. In order to be successful, programs had to be developed in Middle and High Schools to provide a pathway for students desiring a technical career to prepare them for college. Highland and Lancaster High Schools have established Project Lead the Way (PLTW) pre-engineering programs with approximately 200 students enrolled. Knight High School started PLTW in September 2006. Antelope Valley College’s Early College Education Program is planning on introducing PLTW into the curriculum in 2007. Mojave High School has a well established Aerospace

Academy, with 72 students, and Tehachapi has a program called the Tehachapi High Engineering and Manufacturing Academy with over 100 students. Programs were also established to improve teacher training in math and science. The Career Prep and MSET programs have assisted in the performance and college preparation of K-12 students and the production of highly qualified science and mathematics teachers. Additionally, Cerro Coso Community College and the Sierra Sands School District in Ridgecrest are developing a partnership for Middle College High School that will include, among other programs, early access to pre-engineering math, computer programming, and robotics.

The United States is experiencing a need for an increasing number of qualified engineers to fuel its technology-intensive economy. In 2003 alone, it has been estimated that 1.3 million engineering jobs went vacant throughout the country. Nowhere is this need for qualified engineers more apparent than in California's High Desert region. Home to the Air Force Research Laboratory's Propulsion Directorate, the Air Force Flight Test Center, NASA Dryden Flight Research Center, Naval Air Warfare Station, Lockheed Martin's infamous 'Skunk Works', Boeing's Phantom works, Northrop Grumman, and Mojave Spaceport, the Antelope Valley (AV) is one of the best kept secrets in US high technology industry (almost 2.5% of the engineers in the entire state of California live and work in the Antelope Valley!). Approximately 1% of the total population of the AV is made up of engineers, well above the national average of 0.4%. With the high retirement rates projected for the engineering population, it is estimated that as many as 1/3 of the **Antelope Valley's 4,300 engineering jobs will turn over within 5 to 10 years.**³

The Math, Science, Engineering and Technology (MSET) Consortium identified the Antelope Valley scientific, engineering, and technology shortfall. Although it follows a national trend it has a serious local economic impact; several organizations are unable to accept additional work due to their inability to fill their vacant scientific and engineering positions.

The consortium learned that a majority of the students that left home for a technical degree seldom returned to the Valley for work because they were recruited by companies in other areas. Moreover, engineers hired from outside the area seemed to be looking for jobs away from the desert environment as soon as they arrived. The answer seemed to be to "Grow our own engineers" and keep them in the local area. Greater Antelope Valley Economic Alliance President Mel Layne said, "One employment sector that faces challenges is engineering. The average age of engineers in the aerospace field today is 54, and many choose to retire at 55. The future opportunities for young educated workers are huge."

³ Shelley, Ph. D., Jeigh S. (2005). Demographics.

COMMUNITY AND INDUSTRIAL SUPPORT

EXISTING EDUCATION PROGRAMS

In an attempt to identify what education / training opportunities were available to students in the local area, a list of existing programs was reviewed. Although several schools have technically oriented curriculums, the programs are on an individual school basis and there currently is no coordinated program to lead students toward a technical degree. An essential element to improving the transition from high school to the Antelope Valley Community College pre-engineering program is a closer partnership between the two to provide easy transitions into the college program and, where possible, allow high school students to concurrently enroll in lower division college classes. AVC established an Early College Education program to introduce high school students to college programs while they are still in high school. This program emphasizes math, science, and pre-engineering, and will soon introduce Project Lead the Way.

Antelope Valley College, as a member of the MSET Consortium and an active participant in the CSU Fresno-AV Engineering Program, is working in support of the goals of the consortium: namely, to develop a pipeline of students interested in careers in engineering that will feed into AVC programs and on to completion of baccalaureate degrees with CSU Fresno. To achieve this, AVC developed a two-pronged approach aimed at improving teacher training in mathematics and science, and direct recruitment of high school students into the engineering pathway. Moreover, AVC sought grant funding to support these initiatives and has received funding from the following sources:

- **Opening Pathways to College Degrees for Hispanic Students: A Comprehensive and Collaborative Approach,** US Dept. of Education, Title V Grant, AVC, CSU Bakersfield-AV & CSU Fresno-AV 2006- 2011. Major goal to increase the number of mathematics, science, engineering and technology majors. (\$3.5 million / 5 years).
- **Implementing a highly successful instruction model to reduce attrition rate in critical courses of mathematics:** US Dept. of Education, Minority Science and Engineering Improvement Program (MSEIP) AVC, 2006-2008. Major goal to increase success rates in mathematics and to increase transfer rates into mathematics, science and engineering degree programs. (\$168,265 / 3 years).
- **Creating Pathways for Prospective Science and Mathematics Teachers:** NSF, Advanced Technical Education Project 0402690, AVC, 2004-2007. Major goal to provide in service math and science teachers with hands on laboratory experiences and to increase the number of future teachers specialized in Mathematics and Science. The program received an honorable mention by the Phi Theta Kappa Society of Community College Teacher Preparation Programs at their Best Practices Conference 2005.
- **Antelope Valley Math and Science Partnership (AVMSP) Program, California Mathematics and Science Partnership (CaMSP):** Palmdale School

District, CSU Bakersfield-AV, AVC. Major Goal to enhance mathematics and science skills in in-service elementary school teachers.

- **Hewlett Packard Technology for Teaching Grant:** (\$180,000 / 2 years). Using tablet computer technology to improve understanding in Physics, Chemistry and Engineering courses.
- **Boeing Foundation grants:** (approximately \$30,000 per year for the last five years). The grants are used to buy equipment for middle school science lab classrooms. AVC assists with the grants and assumes responsibility to train and mentor the teachers involved. Major goal is to enhance science education.
- **Virtual Flights Loads Lab:** An interface between a middle school classroom and the Flight Loads Lab, NASA Dryden Flight Research Center, AVC and CSU Fresno. NASA grant (\$50,000 / one year). Major goal to interface a middle school classroom with the engineers of the Flight Loads Lab and enable the students to interact in real-time with engineers conducting an experiment.

Antelope Valley College has committed resources in support of the effort to bring a four year engineering degree program to the AV. The most recent effort resulted in the award of the a new Department of Education grant that will help create and sustain a pipeline of engineering students for the next five years.

Antelope Valley Community College is designated as a Hispanic Serving Institution. The recent award of a Title V Grant from the US Department of Education (first bullet above) is a major effort to open pathways for Hispanic students. It should also be noted that 70.8 % of students attending the Antelope Valley High School are minorities.

POTENTIAL UNIVERSITY SITES

The Bureau of Land Management (BLM) and the Air Force support this effort by offering sites for a university located on government lands that can be donated and / or long-term leased for educational purposes. Additionally, Strata Equity Group, a private land developing company has offered to donate 640 acres for a university and is proposing private funding for infrastructure support. Details of two proposals can be found in Appendix G

Community Letters of Support are included in Appendix C.

TECHNOLOGICAL HISTORY OF THE REGION

AEROSPACE VALLEY

The Service Area for the proposed California State Polytechnic University, High Desert is a region commonly referred to as The Aerospace Valley due to its large concentration of aerospace industries.

The Aerospace Valley is rich in historic first flights. “First Flight” is defined as the first flight of an air vehicle which took off, landed, or both at Edwards Air Force Base.

Approximately 160 first flights are documented between September 1929 and May 2002. In addition, major defense contractors such as Boeing, Northrop Grumman, Lockheed Martin, BAE and government agencies such as the NASA Dryden Flight Research Center are active in design, testing, and manufacturing a variety of military and commercial equipment.

Mojave Spaceport (previously Mojave Airport), born as a Marine Corps Air Station, is now home to the nation’s first inland spaceport, a community of innovative professionals developing new technologies to make space travel affordable to the general populace. Mojave Airport is also the home to over a dozen private aircraft and space companies.

The NAVAIR WD, China Lake, located at the North East corner of Kern County, likewise has many first accomplishments. Included are such firsts as: First air-to-air guided missile ever used in combat; first successful anti-radar missile; first U.S. precision guided air-to-surface weapon; and the first technology to photograph the back side of the moon.

This unique technological history sets a powerful precedent for a more hands-on, laboratory oriented polytechnic university in the High Desert.

REGIONAL CONTEXT

SERVICE AREA

The service area for this new university in the High Desert is a geographic area bounded by just north of Santa Clarita on the south to Ridgecrest on the north, Tehachapi on the west and west of interstate 15 on the east. This area is inclusive of the incorporated cities of: Palmdale, Lancaster, Ridgecrest, California City, and Tehachapi. Also included are the communities of Acton, Littlerock, Pearblossom, Lake Los Angeles, Lake Hughes, Elizabeth Lake, Leona Valley, Rosamond, Mojave, Boron, and Antelope Acres. Residents of Bishop, Mammoth Lakes, and the Kern River Valley are also included due to their inclusion in the service area of Cerro Coso Community College. Residents of the communities of Phelan, Hesperia, and Adelanto might also find it more advantageous to attend a university in the High Desert rather than commuting to the San Fernando Valley.

POPULATION

The population of the High Desert is expected to increase 83% by 2030, based on census data projections provided by the Southern California Association of Governments for Los Angeles County and the Kern Council of Governments for the Kern County area. A table of census data is provided in Appendix D. This estimate does not include the projected population resulting from the 23,000 new homes planned for the Centennial Project. This large planned community will be located just east of Interstate 5 at Gorman and will become part of the Antelope Valley Joint Union High School District. This project will dramatically add to the population of the High Desert.

SNAPSHOT OF REGION

MEDIAN AGE

In 2006 the median age in the High Desert was 33 with 31% under 18, 37% between 18 and 45, 23% between 44 and 65 and 9%, 65 and older.

ETHNICITY

The largest ethnic group is white alone (62.14%). Native Hawaiian or Pacific Islander (2.70%) is the second largest (table in Appendix D). By origin, the population is 30% Hispanic or Latino.

EDUCATION

There are 15 public school districts in the High Desert, comprising a total of 127 primary education schools (table in Appendix A). In addition, there are 13 private schools (Appendix A,) in the region.

The High Desert is served by two Community Colleges, Antelope Valley and Cerro Coso. California State University, Bakersfield has an off-campus center in Lancaster and is a major player in the Lancaster University Center. In partnership with CSUB-AV and

California State University, Fresno, the City opened the new \$3.5 million Lancaster University Center (LUC). This 25,000 square foot facility houses 13 “smart classrooms,” and offices. This on-site Lancaster University Center instruction and distance learning program with CSU Fresno AV only provides for mechanical and electrical engineering degrees at the LUC. Fresno awards the diploma. This program, with limited facilities, is run by Fresno’s engineering department and has professors on site and uses distance learning with the main campus for two-way instruction.

CALIFORNIA STATE UNIVERSITIES

California State University, Bakersfield – AV

- BS Business
- BA Child, Adolescent, and Family Studies
- BA Criminal Justice
- BS Communications
- BS Economics
- BA English
- BA Liberal Studies
- BS Nursing
- BA Psychology
- BA Sociology
- MA Educational Administration
- MA Educational Curriculum and Instruction
- MA English
- MA Special Education
- MS Social Work

California State University, Fresno – AV

- BS Electrical Engineering
- BS Mechanical Engineering
- MS Option in Mechanical or Electrical Engineering

PRIVATE UNIVERSITIES

Nine private universities also offer a variety of programs in the region (listing in Appendix E).

PROXIMITY TO OTHER UNIVERSITIES

Although there are a variety of programs offered in the High Desert, with the exception of the minimal Fresno program, none offers undergraduate technical degrees. The closest universities offering an undergraduate degree in engineering are: CSU Northridge (approximately 70 miles), Cal Poly Pomona (approximately 115 miles) and Cal Poly San Luis Obispo (approximately 195 miles). The proposed Cal Poly High Desert University will not jeopardize operations of existing institutions in the proposed service area.

PRE-ENGINEERING

The CSUB-AV campus has 603 Full Time Equivalent students currently enrolled and Antelope Valley College has 9,922 FTEs enrolled. In addition, there are approximately 200 students enrolled in the pre-engineering program Project Lead the Way (PLTW) in Lancaster and Highland High Schools. The Lancaster High School PLTW program is in its third year and Highland High School is in its second year. Additionally, Knight High School started PLTW in September 2006. Antelope Valley College Early College Education Program will add PLTW to the curriculum in 2007. The Mojave High School Aerospace Academy adds an additional 72 students to the engineering pipeline and the Tehachapi High School Tehachapi High Engineering and Manufacturing Academy (THEMA) adds another 100 potential engineering students to the pipeline.

Antelope Valley College has seen enrollment in math and science classes increase by 95.3 students over the last two years. Total student population at AVC is expected to reach 15,585 by 2015. Cerro Coso Community College has a total student headcount of 4,900 with 3,000 FTEs. Cerro Coso also has 900 students enrolled in math and science at its main campus and another 85 students enrolled at satellite campuses.

EMPLOYMENT

The Los Angeles Economic Development Corporation Mid-Year Update: 2006-2007 Economic Forecast and Industry Outlook states the Antelope Valley has seen positive growth trends with total employment in 2006 estimated at a new record level of 72,690 jobs. Much of this growth has been powered by retail trade and by the region being a center for advanced aerospace research and development.

The basis of the Antelope Valley's economic strength is the natural gifts the region offers – mountains of limestone for cement; borates for sustaining life; thousands of acres of flat land on which to grow crops, to build homes and to create businesses; abundant sun and wind to convert to clean power; and clear skies in which to test rockets, radar and aircraft.

The largest employers in the High Desert are Edwards AFB (12,117) and China Lake NAWC (4,986). A table of the High Desert largest employers is provided in Appendix F.

Aerospace and defense continue to be the leading economic contributors in the region. Agriculture, Corrections, Mining, Manufacturing, and Warehousing and Distribution are also major economic drivers. Healthcare is a growing industry in the region and is in need of skilled workers. Educational Services saw a 12.26% growth in 2004 and is expected to continue a positive growth rate as the population continues to increase. Educational Services is experiencing a shortage in teachers, particularly in math, science, English, and school administrators.

ALTERNATIVES CONSIDERED

ALTERNATIVES CONSIDERED FOR HIGHER EDUCATION IN REGION

Existing Programs

Possible alternatives to building a new campus have been explored. An obvious alternative would be the expansion of the CSU Fresno or CSU Bakersfield programs. The Bakersfield program does not have an engineering curriculum and could not meet the pressing needs of the Aerospace Valley. The Fresno program is in a shared facility (Lancaster University Center) with CSU Bakersfield. Neither program has room for expansion at this location, therefore a new campus, at a different location, would have to be developed to house either expansion option.

Distance Learning

Distance Learning is currently being utilized for the minimal engineering program at the LUC. Although Distance Learning has worked for this minimal effort, it does not provide the students with a campus quality of life experience. In addition, the laboratories are limited to supporting the two degree programs (electrical and mechanical engineering) at the LUC. Distant Learning is being considered as an option for engineering lecture classes for outlying populations with a consolidated laboratory program.

Grants and Private Funding

Grants and Private funding sources are a possibility for funding research facilities and potentially some campus facilities. A developer is offering \$15,000,000 for infrastructure and associated needs.

COMMUTING TIMES

Since the High Desert region consists of widely separated communities, a maximum commute time of one hour one way was used as a reasonable travel time for students. This was based on the current commute time to CSU Northridge of 60-90 minutes depending on traffic. It should be noted that currently drive times in the High Desert are relatively easy drives and some students may elect to drive longer to take advantage of the programs at Cal Poly High Desert. Based on the population projections for this area, drive times will increase with the growth of the area. However, the proximity of major arterials should ease congestion somewhat.

TRANSPORTATION

The High Desert is well served by a modern and well-coordinated highway system. State Route 14, a freeway that runs north-south, extends from Interstate 5 in the San Fernando Valley north through Palmdale and Lancaster and continues north to State Routes 395, north of the Ridgecrest turnoff, and 58 northeast of Mojave which connects to Bakersfield in the north and Barstow to the east. In addition, State Route 138 runs east to west, connecting the region to Interstate 15 to the east and Interstate 5 to Gorman in the west.

Rail lines are in place from the Santa Clarita area to Mojave and north to Tehachapi. A rail siding exists North of Mojave Airport which is approximately three miles from a proposed university site. Potentially Metro Link service could be expanded from Lancaster to serve this site.

PROPOSED LOCATION

POTENTIAL SITES

Currently three potential sites have been offered for a university. The first site is a planned community development to include a 640 acre university, research facility, and business park. Single family homes and high density housing along with retail and medical facilities will be located adjacent to the university. In addition to donating the land for the university, Strata Equity is offering \$10 million for site infrastructure and \$5 million for the CSU to use as appropriate for the site. Strata will also prepare the CEQA documentation, prepare a comprehensive Specific Plan, and prepare the EIR.

A second potential site is located on Edwards Air Force Base. A 640 acre site on the western boundary of Edwards has been identified as a possible site for a university. This site is immediately adjacent to the community of Rosamond. The site is native desert and has no infrastructure. An additional access road to Highway 14 will probably be required to handle the additional traffic. Currently, Rosamond Boulevard is the only access to Edwards from the west and the proposed site would share this roadway.

The third potential site consists of several 640 acre parcels from Ridgecrest south to the California City area that the Bureau of Land Management is interested in disposing of. Each parcel is noncontiguous with other BLM lands and is not consistent with BLM land management policies. The selected parcel could be donated to the State for university purposes. These parcels are raw desert and have no infrastructure. Some parcels are remote.

Site evaluation sheets for two potential sites are included in Appendix G. A site evaluation for a BLM site will have to be prepared after a potential site is identified.

UNIVERSITY CONCEPT/VISION

The effort to establish a four-year polytechnic university in the High Desert region of southern California was prompted by the perception that the technical industry of the region cannot hire a sufficient number of engineers and technicians. To begin to address this issue, the Cal Poly High Desert Master Planning Committee created the following mission statement:

“Develop a highly educated, diversified, state-of-the-art workforce by establishing a polytechnic university to meet local, state and global economic needs through the unique resources, research capabilities and attributes of the High Desert region.”

PROBLEM AND DISCUSSION

The following is a description of the problem and a discussion of how a polytechnic university located in the High Desert is needed to resolve the problem.

The main reasons why industry in the High Desert cannot hire a sufficient number of engineers and skilled technicians are that some industries (such as government) are perceived as less desirable employers, the desert living environment can be difficult to acclimate to, and there is no local means to further one's education. Completing an engineering degree is a challenging endeavor, and those who accomplish it are inclined to want to continue their technical education.

A four-year polytechnic university in the High Desert would provide an opportunity for newly hired engineers to earn advanced degrees while also providing BS degrees in engineering curricula to potential new hires for local industry. Students completing a four-year BS degree would be more likely to stay and work here due to the many opportunities to work on new, leading edge technologies and on the research and development activities that take place in the High Desert.

BENEFITS TO REGION

Engineers and faculty from outside the High Desert would be attracted by the potential for a combination of advanced degrees and a greater opportunity for hands-on research which would be supported by the attributes and industry of the High Desert. The unique opportunities in the High Desert area for student intern / co-op / job shadowing programs and faculty research programs are endless. The Air Force Flight Test Center, NASA Dryden Flight Research Center, Air Force Propulsion Directorate, Naval Air Warfare Station, and Mojave Spaceport all have established co-op / intern programs. NASA DFRC and AFRL have established faculty research programs. Industry in the region has similar programs. The industry, in turn, would benefit from a larger pool of potential employees and the ability to influence the education of new and current employees. The overall result would be to attract students, faculty and additional industry from beyond the High Desert region. This would also mean that the original plan for the Cal Poly High Desert University must include the ability to grow to accommodate the future needs of industry, the community and the region. For an educational institution to remain viable and productive, it must grow.

High Desert industry is in competition for engineers with industry in other regions in the nation that have more attractive employment, living and educational opportunities. These regions have universities with many colleges, thousands of students and alumni, research centers, test facilities, substantial libraries, student resources and industry support. To successfully compete for potential employees, the High Desert must pursue a similar infrastructure. The initial plans would be for a core set of campus buildings and labs with several colleges open for business. These plans would include additional phases of development when more buildings, labs and colleges are added. Other infrastructure would develop as future needs of industry, community and the region evolve.

DEPARTMENT OF CIVIL ENGINEERING

An innovative idea is to create a sub-department in the Department of Civil Engineering in the College of Engineering that works with the on-campus colleges and research centers to grow the campus infrastructure over time with input from students, faculty, industry and others. This sub-department would allow students to participate, learn and get firsthand experience with the planning and building of energy and material efficient infrastructure. The growing campus would become a hands-on laboratory.

RESEARCH CENTER

Locating a California Polytechnic University in the High Desert would place it among wind and solar farms, geothermal and hydroelectric plants, oil fields and refineries, a unique position to address the growing planet wide demand for energy. To address this demand, an Energy Science and Engineering Research Center could be established at the new university. In addition to addressing an urgent world issue, the research center would become a magnet for high caliber faculty and students.

The mission of the Research Center would be to foster and promote discovery of and investigation into new concepts for energy generation, transmission and consumption. The emphasis would be divided equally between empirical investigation at a remote test facility and the study of conventional theory at the campus. This test facility would provide a remote, outdoor laboratory environment to support this new university, other universities, industry, government agencies, technical organizations and individuals.

The Research Center and University would provide the students with a foundation for originating and pursuing concepts to improve present-day energy generation, transmission and consumption in all areas of human endeavor as well as new and evolving energy technologies. Colleges of Mechanical and Electrical Engineering, Geology, Earth Sciences and others would support the Research Center. This foundation would include understanding the Earth as a system that produces and uses energy.

The test facility would be in a remote location in the desert to provide greater latitude for testing unknown processes and hardware. Infrastructure such as buildings, equipment and a power and water distribution system would constitute the permanent core of the facility. Other infrastructure for specific tests would be established and maintained for the duration of the test and then removed if deemed of no further use. The buildings, structures and equipment would be modest, simple and functional. A small group of people would be responsible for all aspects of the facility including safety, facility establishment, management, operation, construction, maintenance and deciding if a test is suitable for the facility. The skills required for this job are many and include design, fabrication, construction, equipment operation, liaison, and hazardous material management. The policy of the facility would be that the people operating the facility are vested in conducting each test safely and productively. They would be there to provide more than just a piece of dirt to test on.

A remote location away from population centers would reduce inhibitions about catastrophic events that can happen when testing new concepts for the first time. The hot,

cold, windy, dry climate would preserve facility assets and stress energy systems. In the High Desert there is a greater availability of a large piece of remote land with fewer restrictions.

DEPARTMENT OF ENERGY ENGINEERING

The Department of Energy Engineering in the College of Engineering could provide courses towards a BS in Energy Engineering. The first courses could be introductory courses such as Intro to Energy Science, Intro to Energy Engineering and Intro to Energy Technical Management. There could be a further 2 or 3 year graduate program in Energy Engineering including internship to the High Desert electric and gas companies and local and state governments. Undergraduate and graduate hands-on projects at the campus labs and remote test facility might include large volume energy storage in the desert, energy efficient desert and mountain home design and fabrication, solar cell and wind turbine hardware design, fabrication and test and geothermal process and hardware investigations. Industry could be enticed to support such an effort if they were given the opportunity to participate in the curriculum and facility development and if graduate students were available to participate in some of their research efforts.

Other on-campus research centers such as Waste Science and Management, Natural Resource Science and Management and Transportation Science, Engineering and Management could be supported with on-campus labs and infrastructure at the remote test facility. This would attract other industries to the High Desert.

The university and remote test facility could also address other industry endeavors. Examining environmentally friendly ways of extracting, processing and transporting raw materials would support the mining and oil industries. Ways of exploiting the hot, cold, dry climate of the desert for the recycling industry could be studied. These include developing efficient processes to separate recyclable from non-recyclable material, extract energy from non-recyclable material and transport recycled and non-recycled material. The desert environment can also be a laboratory for the evaluation of building designs and construction materials, passive heating and cooling concepts and water use.

COLLEGES OF BIOLOGY AND GEOLOGY

To complement these research centers and degree programs there would be Colleges of Biology and Geology. These colleges would have the California High Desert, one of the most accessible geologic regions on the planet, as a local laboratory. Biology, geology and ecology are fundamental to successful environmental and economic management of energy and raw materials.

Industry employees would become faculty and faculty would become employees working in industry, campus research centers, labs and the remote test facility. A symbiotic relationship between the university colleges, the research centers and High Desert industry would grow into a solid cornerstone of the Cal Poly High Desert University.

CAMPUS LOCATION

The new campus and remote test facility should be centrally located among existing High Desert industry and planned industry growth to encourage this symbiotic relationship.

Research efforts such as wind and solar farms, mining and geothermal energy are already in place in the High Desert and are one of the incentives for locating the new university here.

As this university grows into a world-class institution through the implementation of a demanding curriculum, combined with colleges, research centers, test facilities and industry participation, it will attract high caliber faculty and students seeking the Cal Poly High Desert education.

Integrating this new university with the unique resources, research capabilities and attributes of the High Desert region will evolve a highly educated, diversified, state-of-the-art workforce to meet the local, state and global economic needs of today and tomorrow.

APPENDICES

APPENDIX A

EDUCATION, SCHOOL DISTRICTS / UNIVERSITIES

EDUCATION

The High Desert has 15 public school districts:

Acton-Agua Dulce Unified District (K-12), 4 schools
Antelope Valley Union High School District, 12 schools
Eastside Union School District (K-8), 5 schools
Gorman School District (K-8), 4 schools
Hughes-Elizabeth Lake Union School District (K-8), 1 school
Keppel Union School District (K-8), 6 schools
Lancaster Elementary School District (K-8). 18 schools
Palmdale School District (K-8), 26 schools
Westside Union Elementary School District (K-8), 10 schools
Wilsona School District (K-8), 4 schools
Mojave Unified School District (K-12), 8 schools
Muroc Joint Unified School District (K-12), 7 schools
Southern Kern Unified (K-adult), 5 schools
Sierra Sands Unified School District, 11 schools
Tehachapi Unified School District, 6 schools

In addition there are 13 private schools in the region.

The area is served by two community colleges: Antelope Valley and Cerro Coso. California State University, Bakersfield has an off-campus center in Lancaster and is a major player in the Lancaster University Center. In partnership with the City of Lancaster and California State University, Fresno, the City opened the new \$3.5 million Lancaster University Center (LUC). This 25,000 square foot facility houses 13 “smart classrooms” and offices. This on-site Lancaster University Center instruction and distant learning program with CSU Fresno AV provides for mechanical and electrical engineering degrees at the LUC. This program, run by Fresno’s engineering department, has on site professors and uses Distant Learning with the main campus for two-way instruction.

Although there are a variety of programs offered in the Aerospace Valley, with the exception of the minimal Fresno program, none offer undergraduate technical degrees and few offer any selection of undergraduate liberal arts classes. The closest universities offering an undergraduate degree in engineering are CAL POLY Pomona (approximately 115 miles) and CAL POLY San Luis Obispo (approximately 195 miles). The proposed CAL POLY High Desert University will not jeopardize operations of existing institutions in the proposed service area.

CALIFORNIA STATE UNIVERSITIES

CALIFORNIA STATE UNIVERSITY, BAKERSFIELD – AV

- BS Business
- BA Child, Adolescent, and Family Studies
- BA Criminal Justice
- BS Communications
- BS Economics
- BA English
- BA Liberal Studies
- BS Nursing
- BA Psychology
- BA Sociology
- MA Educational Administration
- MA Educational Curriculum and Instruction
- MA English
- MA Special Education
- MS Social Work

CALIFORNIA STATE UNIVERSITY, FRESNO – AV

- BS Electrical Engineering
- BS Mechanical Engineering
- MS Option in Mechanical or Electrical Engineering

PRIVATE UNIVERSITIES

Several private universities also offer a variety of programs in the region:

National Test Pilot School

- MS Flight Test Engineering
- MS Flight Test and Evaluation

University of Laverne

- BA in Business Administration
- BS Health Administration
- BS Organizational Management
- BS Public Administration
- MBA Business Administration
- MS Education and Health Administration
- MS Leadership and Management
- MS Public Administration
- MS School Counseling

Chapman University

BA Criminal Justice
BA Psychology
BA Social Science
BS Computer Information Systems
MA Education, Curriculum and Instruction
MA Education, Educational Leadership and Administration
MA Education, Reading
MA Psychology
MA Special Education
MA Elementary Education
MA Secondary Education
MA Special Education Emphasis

University of Phoenix

BS Business Administration or Management
BS Information Technology
BSN Nursing
MBA Business Administration
MSN Nursing
MA Organizational Management

Embry Riddle University

AS Professional Aeronautics
AS/BS Technical Management
BS Professional Aeronautics
BS Aviation Maintenance Management
MS Aeronautical Science
MS Technical Management

University of Southern Illinois

Industrial Technology

Aero Institute

Purdue University
MS Mechanical Engineering
MS Electrical and Computer Engineering
MS Industrial Engineering
MSE and MBA
CSU-Polytechnic University – Pomona

APPENDIX B

SKILL SETS

SPECIFIC CURRICULA/DEGREES

Engineering		
	Aerospace	Logistics
	Automotive	Logistics
	Bio-medical	Materials / Composites
	Chemical	Mechanical
	Civil/Construction	Mining
	Computer	Nuclear
	Electrical / Electronic	Petroleum
	Energy	Safety
	Environmental	Systems
	Geological	Test and Evaluation
	Industrial	
Science		
	Biology	Environmental
	Computer / IT	Agriculture / Micro-Agriculture
	Graphics / Computer Graphics	Physics
	Engineering Psychology	Inorganic/ Organic Chemistry
	Geology	
Health Services / Health Care		
	Doctors	Medical Technicians
	Nurses	Physical Therapists
	Social Services	Occupational/ Speech Therapists
	Social Workers	Geriatric Specialists
	Pharmacists	Mental Health Professionals
Education Business		Business
	Administrators	Financial
	Teachers	Program / Project Management
	Math	Contracting
	Science	Management
	Industrial Technology	Marketing
	English	Logistics
	Foreign Languages	Personnel / Human Resources
	Elementary Education	
	Special Education	
Legal		
	Attorneys	
	Clerks	
	Criminal Justice	
Other		
	Linguist / Translator	

APPENDIX C

LETTERS OF SUPPORT

APPENDIX D

POPULATION PROJECTIONS

Based on census data projections provided by the Southern California Association of Governments for Los Angeles County and the Kern Council of Governments for the Kern County area, the following total population growth figures are provided:

U.S. CENSUS POPULATION PROJECTIONS								
CITY	2005	2015	2020	2025	2030	DIFF	% DIFF	COMMENTS
California City / Mojave	21,358	25,367	28,533	32,497	37,743	16,385	43	Includes greater Cal. City/ Mojave area
Lake Isabella	17,750	18,163	18,919	19,713	20,547	2,797	14	
Lancaster / Palmdale	380,625	546,952	634,164	717,540	797,014	416,389	52	Includes greater AV
Ridgecrest	34,261	37,673	39,420	41,426	41,463	7,202	17	
Rosamond	22,588	26,020	28,257	30,969	34,466	11,878	34	Includes greater Rosamond area
San Bernadino County	286,609	371,656	419,099	464,567	508,155	221,546	46	Includes high desert area
Santa Clarita	234,638	307,799	336,361	361,511	385,716	151,078	39	
Tehachapi	35,438	44,590	49,944	56,098	62,320	26,882	43	Includes greater Tehachapi area
TOTAL	1,014,267	1,378,220	1,554,697	1,724,321	1,887,424	873,157	83	

APPENDIX E

POPULATION DEMOGRAPHICS HIGH DESERT

MEDIAN AGE

In 2006, the Aerospace Valley's population median age was 32.37 years. Population is distributed by age as follows:

Under 18	138,777	31%
18-44	164,013	37%
45-65	103,874	23%
65 and older	39,678	9%

POPULATION BY RACE AND ORIGIN

*Population by race is distributed as follows:

Black/African American alone	13.23%
White alone	62.14%
Native Hawaiian or Pacific Islander	2.70%
American Indian / Alaskan Native	1.13%
Asian	3.19%
Some other Race	15.24%
Two or More Races	4.79%

*Population by origin is as follows:

Hispanic or Latino	30.00%
Not Hispanic or Latino	70.00%

* Economic Roundtable Report, Greater Antelope Valley Economic Alliance, 2006.

APPENDIX F

LARGEST EMPLOYERS

The largest employers in the Greater Antelope Valley are shown in the following table:

GREATER ANTELOPE VALLEY LARGEST EMPLOYERS*

COMPANY	No. of EMPLOYEES	COMPANY	No. of EMPLOYEES
Edwards AFB	12,117	Lowes	455
China Lake NAS	4,986	City of Lancaster	450
Lockheed Martin	4,200	Home Depot	424
County of LA	3,441	Starwood	408
AV High School Dist	2,400	McDonnell Douglas	387
AV Hospital	2,200	High Desert Medical Group	375
Palmdale School Dist	2,992	Lance Campers	353
Lancaster School Dist	2,142	Deluxe Corp.	325
Countrywide	2,200	Target (2 stores)	322
Northrop Grumman	1,633	S. Kern School District	320
Wal-Mart (4 stores)	2,047	City of Palmdale	312
Mira Loma-CA Prison	1,295	Costco	305
AV Mall	1,500	Wilsona School	287
Westside School Dist	1,137	Mojave School District	275
Boeing (2 Div.)	1,000	Muroc School District	273
Rite Aid Distribution	967	U.S. Pole	263
AV College	824	Michael's Distribution	260
Rio Tinto (U.S. Borax)	780	Symvionics	250
Sierra Sands School Dist.	600	Sears, Roebuck	239
Anderson Barrows	550	Sam's Club	220
Kaiser Permanente	550	AV Press	215
Lancaster Comm. Hospital	530	GE Wind Energy	210
Tehachapi School Dist	525	Best Buy	200
Federal Aviation Admin.	486	Rally Chevrolet	189
Albertson's Food (4 stores)	641	Acton-Aqua Dulce School	180
High Desert Health Sys.	460		
Keppel School District	458	TOTAL	59,798

* 2006 Economic Roundtable Report, 2006 Business Outlook Conference.

APPENDIX G

SITE EVALUATIONS FORM EDWARDS AIR FORCE BASE

1. Proposed Site Location
 - a. Distance from published Department of Defense low-level flight routes 2 miles.
 - b. Distance from any airport approximately 5 miles from Rosamond Airport.
 - c. Distance from any noise environment 1 mile for aircraft overflight.
 - d. Is site compatible with existing land use maps? No Site is on a military installation. Kern County would have to amend land use maps for the area.
 - e. Does the site have room for expansion? Yes How much land? Additional land would have to be negotiated with Air Force.
2. Is site in county or city jurisdiction? County _____ City _____
Site is under military jurisdiction.
3. Acreage of proposed site:
 - a. 649 acres
4. Is site near major arterials?
 - a. Approximately 3 miles from Highway 14 and one mile from Rosamond Boulevard.
5. Has land been donated?
 - a. Land will probably not be donated but could potentially have a 99 year lease.
 - b. Does community support university location?
Yes. The community supports a university in the area.
 - c. Is infrastructure available?
No. Kern County would have to provide the infrastructure since the proposed site is miles from the infrastructure on base.
6. Distance to complementary facilities
 - a. HOUSING: 2 miles
 - b. RETAIL/SHOPPING: 2-3 miles
 - c. EMPLOYMENT: 18 miles
 - d. CULTURAL FACILITIES: Site is approximately 20 miles from the Flight Test Museum, 18 miles from the Antelope Valley Fairgrounds and Jethawks Stadium.
 - e. RECREATIONAL FACILITIES: Many recreational facilities are located within about a 40 mile radius.
 - f. PUBLIC TRANSPORTATION: None
7. Does the site offer desirable natural features; beauty, spirit, and feeling?
The site is located just east of the Tehachapi Mountains

SITE EVALUATION FORM

STRATA EQUITY GROUP, INC



STRATA EQUITY GROUP, INC.

January 11, 2007

The Aerospace Office, Inc.
Mr. Bob Johnstone
P.O. Box 2494
Lancaster, CA 93539-2494

Dear Mr. Johnstone,

Strata Equity Group, Inc is delighted to submit the enclosed Site Evaluation Form as part of our application and offer to donate land for the Cal Poly University, High Desert.

Over the past year, we have had the opportunity to meet and dialog with many government, industry and education leaders who have all expressed strongly the same message: the Antelope Valley and Victor Valley NEED a comprehensive, polytechnic university! Through our dialogs we have learned much about the region's character, employment base, and population growth trends. We concur that a Cal Poly University is ideal for the region and that the ideal site, due to many factors, for this future reality is located on land that Strata Equity Group, Inc. already owns near the intersection of Highways 14 and 58 near the communities of Mojave and California City.

Therefore, it is with great pride that we offer to donate 640 acres of land to Cal State University to assist the region in realizing this need. Upon reviewing our application, you will find that our offer extends well beyond the land donation. The supporting criteria and additional offerings as highlighted in the enclosed form should relay to you Strata Equity's enthusiastic commitment to be a partner in the vital economic growth of the Antelope Valley for many years.

If you have any questions of the enclosed application or if we may assist in any way with your Master Plan documentation, please contact me or Eric Flodine, our Vice President of Community Planning.

Very Sincerely,



James M. Kozak
President

Real Estate Investments

4370 La Jolla Village Drive Suite 960 San Diego, CA 92122 Tel: (858) 546-0900 Fax: (858) 546-8725 www.strataequi

SITE EVALUATION FORM

PLEASE SEE ATTACHMENT "A" FOR ANSWERS TO THE FOLLOWING QUESTIONS.

1. Proposed Site Location
 - a. Distance from published Department of Defense low level flight routes?
 - b. Distance from any airport?
 - c. Distance from any noise environment?
 - d. Is site compatible with existing land use maps? Yes No
 - e. Does the site have room for expansion? Yes No
 - f. How much land?
2. Is site in county or city jurisdiction? County City
3. Acreage of Proposed Site:
 - a. acres _____
 - b. Is site near major arterials?
4. Has land been donated? Yes No If not, when will it be donated?
A letter of intent to donate, contingent on funding availability for project with 10 year "sunset" clause is adequate initially.
5. Does community support university location? Yes No
6. Is infrastructure available? Yes No
"Will serve" letters will be adequate to determine the availability of water, sewer, and electrical service.
7. Distance to complementary facilities
 - a. Housing? _____ miles
 - b. Retail/shopping? _____ miles
 - c. Employment? _____ miles
 - d. Cultural facilities? _____ miles
 - e. Recreational facilities? _____ miles
 - f. Public transportation? _____ miles
8. Does the site offer desirable natural features; beauty, spirit, and feeling?
 - a. Describe.
9. Additional Comments

ATTACHMENT A

- 1a. Southeast perimeter of site is located approximately 1.4 statute miles from R-2515 Airspace. Central portion of site is located approximately 2.1 statute miles from R-2515 Airspace. (Refer to “Jurisdictional Policy Areas” Exhibit)
- 1b. Western perimeter of site is over 1.5 nautical miles east of the planned extension of Runway 8-26 of the Mojave Airport. Central portion of site is over 2.0 nautical miles east of the planned extension of Runway 8-26 of the Mojave Airport. (Refer to “Jurisdictional Policy Areas” Exhibit)
- 1c. Per the adopted Kern County Airport Land Use Compatibility Plan (ALUCP), dated March 2004, the western perimeter of site is over 1.5 statute miles from the 60 CNEL noise contour and the central portion of site is over 2.0 statute miles from the 60 CNEL noise contour. The Southwestern quadrant of the site is overlaid by the 90db Single Event Noise Level modeled within the ALUCP.
- 1d. Yes, site is compatible. Site is currently located in County Jurisdiction between the Mojave Specific Plan and the City Boundary of California City. Site is bordered along its entire western boundary by the Kern County-adopted Mojave Specific Plan, dated October 2003. (Refer to “Jurisdictional Policy Areas” Exhibit) The land use designation along the entire western boundary is “7.1 Light Industrial”. Per the County General Plan this land use designation permits “unobtrusive industrial activities that can locate in close proximity to residential and commercial uses with a minimum of environmental conflicts. These industries are characterized as labor-intensive and nonpolluting and do not produce fumes, odors, noise, or vibrations detrimental to nearby properties. Uses shall include, but are not limited to, the following: Wholesale businesses, storage buildings and yards, warehouses, manufacturing, and assembling.”

Site is bordered on northern, eastern and southern boundaries by properties with land use designation of “8.5 Resource Management”. Per County General Plan this land use designation may be characterized by physical constraints, or may constitute an important watershed recharge area or wildlife habitat or may have value as a buffer between resource areas and urban areas. All required CEQA documentation and processes will be followed on this site to determine if the designation is a result of these environmental concerns. However, it is more likely that the current land use designation results from another provision of the designation “are undeveloped, non-urban areas that do not warrant additional planning within the foreseeable future because of current population (or anticipated increase), marginal physical development, or no subdivision activity.” A Specific Plan will be prepared for the site and surrounding properties in common ownership which will result in a comprehensive and compatible land use plan.

- 1e. The site offered consists of 640 gross acres to allow a University Master Plan which can phase in growth as well as accommodate supporting and compatible Research and Development uses adjacent to the University Campus. (Refer to “University Town Concept Plan” Exhibit)

ATTACHMENT A

Continued

2. Site is currently located in Kern County jurisdiction. Site is located easterly and immediately adjacent to the Mojave Specific Plan Area and westerly and one (1) mile from the current City Boundary for California City. (Refer to “Jurisdictional Policy Areas” Exhibit)
3. Site is 640 gross acres represented as Section 7 within T11N, R11W. (Refer to “Jurisdictional Policy Areas” Exhibit)
- 3a. Site is located approximately 4 miles southeast of the Highway 14 / Highway 58 interchange. Western perimeter of site is located approximately one (1) mile due east of Highway 58 Bypass with opportunity for a future interchange at Arroyo (Joshua) Road and two (2) miles north from an existing Highway 58 Interchange at Exit 172. (Refer to “Jurisdictional Policy Areas” Exhibit)
4. A letter of intent to donate from Strata Equity Group, managing entity of the subject property, will be submitted for incorporation in the overall University Application. The letter of intent to donate will be contingent on funding availability. Generally, the letter of intent will agree to donate the land for a base period of five (5) years with the ability for a maximum of five (5), one (1) year extensions when mutually agreed to by the property owner and Cal State University. The maximum term of the sunset clause shall not exceed 10 years unless mutually agreed to by both parties. Deed of Gift will contain standard restrictions limiting donated property use to higher education and related uses. More exact terms will be clearly defined in the future letter of intent.
5. Yes, the overall community supports the University Location. Letters of support for this location will be forwarded for incorporation in the University Application prior to formal submittal by Antelope Valley Board of Trade to Cal State University. This support will include letters from the Mojave Airport Board of Directors and Edwards Air Force Flight Test Center.
6. Yes. Will Serve letters for water, sewer and electrical will be obtained by Strata Equity Group.
- 7a. Site is centrally located to existing housing neighborhoods located in various cities and communities within the region: Mojave approximately 5 miles southwest, California City approximately 10 miles northeast, Rosamond approximately 15 miles southwest, Tehachapi approximately 20 miles west, Boron approximately 25 miles east, Lancaster approximately 25 miles southwest, Palmdale approximately 35 miles southeast, Ridgecrest approximately 55 miles northeast, Barstow approximately 60 miles east, and Victor Valley approximately 65 miles east. (Refer to “University Service Area” Exhibit) Refer to #9 Additional Comments for future housing opportunities.

ATTACHMENT A

Continued

- 7b. Site is located approximately 5 miles from existing neighborhood level retail, dining and lodging opportunities within Mojave and approximately 12 miles from neighborhood retail services within California City. The Antelope Valley Mall, a regional shopping center, is approximately 40 miles southwest. (Refer to “University Service Area” Exhibit) Refer to #9 Additional Comments for future retail opportunities.
- 7c. Site is located within 10 miles of two of the region’s major employment centers: Mojave Airport (and its tenants) and Edwards Air Force Base. Additionally, many other existing major Antelope Valley employers, including government, aerospace, mining, engineering, medical, retail, education and service sectors are located within 35 miles or less of the site. (Refer to “University Service Area” Exhibit) Refer to #9 Additional Comments for future employment opportunities.
- 7d. Site location offers convenient access to many existing cultural venues. It is located approximately 20 miles from the Edwards Air Force Flight Test Museum, approximately 25 miles from the Antelope Valley Fairgrounds, approximately 25 miles from the Twenty Mule Team Museum, approximately 30 miles from the Jethawks Class A Baseball Stadium, and approximately 40 miles from the Plant 42 Heritage Airpark. Refer to #9 Additional Comments for future cultural opportunities.
- 7e. Site is centrally located for many of the region’s existing recreational opportunities, including: Tierra del Sol Golf Course is approximately 15 miles northeast, Red Rock Canyon State Park is approximately 20 miles north, California Poppy Preserve is approximately 25 miles southwest, and Mountain High Ski Resort is approximately 70 miles southeast. (Refer to “University Service Area” Exhibit) Refer to #9 Additional Comments for future recreational opportunities.
- 8. Site location provides visual and physical access to many of the natural features and attributes which characterize California’s High Deserts including the Antelope Valley. Located at the foot of the southern Sierra Nevada Mountains and just east of the Tehachapi Mountains, the site affords stunning vistas of mountain peaks and the “big sky” feeling of the desert. (Refer to Enclosed Site Photos.)
- 9a. The subject property owner, Strata Equity Group, controls approximately 3,000 additional acres adjacent to the subject site which are ideal for the planning and development of a master planned community (e.g., “University Town”) offering a spectrum of complimentary land uses, such as housing, retail, research, employment, cultural, lodging, recreational, open space and public transportation nodes. This arrangement offers increased opportunities for University support and private-public partnership opportunities benefiting the entire region than any isolated sites which may be surrounded by disjointed ownerships. (Refer to “University Town Concept Plan” Exhibit.)

ATTACHMENT A

Continued

- 9b. In addition to the subject site land donation Strata Equity Group will pay for technical consultants to prepare necessary CEQA base information, the preparation of a comprehensive Specific Plan for all properties in the area including the University Site and the preparation of the EIR.
- 9c. As part of an approved comprehensive Specific Plan, including all adjacent properties owned by Strata Equity Group, Strata will coordinate with Kern County Planning Department and County Board of Supervisors to process an amendment to the Airport Land Use Compatibility Plan (ALUCP). The amended ALUCP for Mojave Airport/Spaceport would extend and enlarge the B2 Zone for Runway 8-26 to the east by approximately 1.75 miles which will more than double the existing B2 Zone for this runway. (Refer to “Jurisdictional Policy Areas” Exhibit.)
- 9d. In addition to the subject site land donation and necessary technical studies and documents, Strata Equity Group will provide an additional \$15,000,000 of which \$10,000,000 shall be used solely for site infrastructure and \$5,000,000 cash for use by Cal State University where it deems most appropriate. Scheduled payment of these funds will be determined and mutually agreed upon by Cal State University and Strata Equity Group.

APPENDIX H COMMITTEE MEMBERS

WORKFORCE DEVELOPMENT SUBCOMMITTEE

- Ms. Shirley Kemp EDD Manager
- Ms. Lilian Velazquez Acosta Mojave Faculty Association
- Ms. Carmen Adams Rosamond Women's Club
- Ms. Page Chen AV Hospital
- Ms. Deborah Frazier California State University Bakersfield-AV
- Ms. Cathy Gutierrez Auto Pros II / Century 21
- Dr. Rosa Hall Antelope Valley College
- Ms. Kristine Holloway California State University Bakersfield-AV
- Mr. Ken Hritz Lancaster Community Hospital
- Mr. Larry Levin Community Advocate
- Dr. Sharon Lowry Antelope Valley College
- Ms. Tracy Russ Edwards Air Force Base
- Dr. Les Uhazy Antelope Valley College
- Mr. Ted Youngblood Antelope Valley College

LAND / RESOURCES SUBCOMMITTEE

- Mr. Robert Johnstone The Aerospace Office, Inc
- Mr. Richard Caulkins Engineer, L.A. County Sanitation District
- Mr. Larry Chimbole Retired
- Mr. Eric Flodine Strata Equity Group
- Mr. John Frehn Frehn Civil Engineering
- Mr. Ron Halter Retired Engineer, Naval Weapons Station, China Lake
- Mr. Norm Hickling Field Representative, L.A. County Supervisor Antonovich
- Mr. Chip Holloway Mayor, City of Ridgecrest
- Dr. John Hultsman Associate V.P., Director, CSUB-AV
- Ms. Shirley Kennedy Assist. Superintendent, Sierra Sands Unified School Dist.
- Mr. Jon McQuiston Kern County Supervisor
- Mr. Craig Peterson Assistant to Kern County Supervisor Jon McQuiston
- Dr. Mary Retterer Interim President, Cerro Coso College
- Ms. Wendy Waiwood Deputy Chief, Plans Office, Air Force Flight Test Center
- Ms. Vanessa Walker Program Analyst, Air Force Flight Test Center

MASTER PLAN COMPILATION SUBCOMMITTEE

- Mr. Robert Johnstone The Aerospace Office, Inc
- Mr. Ranney Adams Public Affairs, A.F. Rocket Propulsion Division
- Ms. June Battey Director, Schools to Careers
- Ms. Carla Cannington Air Force Flight Test Center, Workforce Development
- Mr. Jack Chandler Realtor
- Ms. Page Chen A.V Hospital Community Education Coordinator
- Ms. Katie Corbett Corbett Professional Services
- Ms. Janette Crawford Eastside Union School Board Member
- Mr. Tony Damiano Adjunct Professor, Cerro Coso College
- Mr. John Frehn Frehn Civil Engineering
- Ms. Rosa Fuller UCLA - EAOP/AV Site Coordinator
- Ms. Josephine Gray Retired, Board of Trade
- Mr. Ed Grimes Mayor, City of Tehachapi
- Mr. Mario Gutierrez Southern Kern Unified School District
- Mr. Ron Halter Retired Engineer, Naval Weapons Station, China Lake
- Ms. Deborah Hand Mayor Pro Tempore, City of Tehachapi
- Ms. Debbie Hess SCE
- Mr. Chip Holloway Mayor, City of Ridgecrest
- Ms. Kristine Holloway CSUB-AV
- Mr. Mike Huggins Chief, A.F. Rocket Propulsion Division
- Dr. John Hultsman Associate VP, Director CSUB-AV
- Mr. Rodney Jacobson Great Southwest Mortgage
- Ms. Shirley Kennedy Assist. Superintendent, Sierra Sands Unified School Dist.
- Ms. Debby Kilburn Professor Computer Information Systems, Cerro Coso
- Mr. Ted Landsgaard Realtor
- Mr. Forest Lloyd President, Rotary of China Lake
- Mr. Rex Moen Field Representative to Senator Roy Ashburn
- Ms. Anne Marie Novinger Tehachapi Hospital Advisory Board/Collaborative, EDC
- Mr. George Novinger Retired Principal Tehachapi High School
- Ms. Lori Parker Drummond Medical Center, Ridgecrest
- Dr. Larry Phelps Superintendent, Mojave Unified School District
- Mr. Craig Peterson Assistant to Kern County Supervisor Jon McQuiston
- Mr. Sheldon Ralph Regional V.P American Security Bank
- Dr. Mary Retterer Interim President, Cerro Coso College

MASTER PLAN COMPILATION SUBCOMMITTEE (Continued.)

- Mr. Wayne Rosenberger President, American Security Bank
- Dr. Joanna Rummer Superintendent, Sierra Sands Unified School District
- Mr. Randall Scott President, Career Prep Council
- Mr. Ira Simonds AVUHSD Board Member
- Ms. Amie Steele CSU, Fresno - AV, Lancaster Coordinator
- Ms. Mariana Teal Correctional Health Services Administrator
- Dr. Les Uhazy Dean, Math and Science, Antelope Valley College
- Dr. David Vierra Superintendent, Antelope Valley High School District
- Ms. Vanessa Walker Air Force Flight Test Center Plans and Programs
- Mr. Brent Woodard Antelope Valley High School District (AVHSD)