

Political Implications of Potential New San Diego International Airport Locations

Politics

MBA Masters Project

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TABLE OF CONTENTS

ABSTRACT	1
INTRODUCTION	2
Section I: Marine Corps Air Station Miramar	4
A. History.....	4
B. Major Political Barriers	4
i. Marine Corps.....	4
ii. San Diego City Council	6
iii. Federal Government/Congress.....	7
iv. Environmental Restrictions	8
C. Additional/Unique Issues	11
i. Relocation of Existing Establishments.....	11
ii. Public Opposition.....	12
iii. SANDAG.....	12
iv. Miramar Landfill.....	13
v. Political Synergy	13
Section II: Campo/Boulevard	14
A. History.....	14
B. Major Political Barriers	15
i. Remote Location	15
ii. Solar/Wind Energy Corridor	15
iii. Environmental Restrictions	16
iv. Native American Indian Reservation	18
C. Additional/Unique Issues	18
i. Relocation of Existing Establishments.....	18
ii. Utilities.....	18
iii. Maglev Trains	19
Section III: MCB Camp Pendleton	20
A. History.....	20
B. Major Political Barriers	21
i. Marine Corps.....	21
ii. Oceanside City Council.....	21
iii. Federal Government/Congress.....	22
iv. Environmental Restrictions	23
C. Additional/Unique Issues	25
i. Relocation of Existing Establishments.....	25
ii. Airspace Regulations	26
iii. Business Community	27
iv. Transportation	29
v. Oceanside Municipal Airport.....	30
vi. Expansion at McClellan-Palomar Airport.....	30
Section IV: Final Recommendations	31
A. MCAS Miramar.....	32
B. Campo/Boulevard.....	32
C. Camp Pendleton.....	32
REFERENCES	33

Abstract

This study outlines the political implications of developing a new international airport in three different locations; Marine Corps Air Station Miramar, Campo/Boulevard, and Marine Corps Base Camp Pendleton. In 2006, the Ricondo & Associates Consulting Group created a report evaluating the advantages and disadvantages of building an airport at each of these sites. This study builds on the Ricondo Study by analyzing modern political issues which support or discourage each development scenario. It is meant to assist decision-makers determine where to build a new airport by providing a clearer understanding of this complex issue. Each scenario outlines the major political barriers to building an airport in that location. Following each scenario is a description of additional obstacles associated with each site, as well as recommendations on how some of these barriers may be overcome.

Marine Corps Air Station Miramar was selected in the Ricondo Study as the most favorable site. A proposition was added to the San Diego Ballot in November of 2006 to determine whether San Diego citizens wanted an airport at Miramar. The results came back negative. Section I explains why the proposition failed and provides information on the political power groups which must be satisfied before the project can succeed. It also includes a list of jurisdictional, environmental, and ecological complications associated with developing on MCAS Miramar. The Marine Corps and communities around MCAS Miramar oppose the project.

Campo/Boulevard is an attractive development site because it is remote and there are fewer political barriers to building an airport there. The main complications for this scenario are distance, cost, and ecological impact. The only way to create a cost-effective airport in this region is to install a rapid mass transit system to ferry cargo and travelers into the more populated areas of San Diego. Opponents of this project claim the transit system is cost prohibitive. Section II describes these ecological and financial barriers in detail. In the last year, this region has been targeted by a group of green energy companies for a green energy corridor for San Diego County. In ensuing years it will become heavily populated with solar arrays and wind turbines. The residents of small communities in the Campo and Boulevard regions oppose the project.

Marine Corps Base Camp Pendleton is an attractive site because it is located on the northern tip of San Diego and has a great deal of undeveloped land available. Like MCAS Miramar, the land is owned by the Marine Corps and acquiring it requires action on a Federal level. Section III describes the social, environmental, and ecological impact of developing an airport in this location. The Marine Corps and communities around Camp Pendleton oppose the project.

Introduction

San Diego International Airport is the second busiest single-runway airport in the world. Since the early 1980's the City of San Diego, San Diego Association of Governments (SANDAG), and the San Diego Regional Airport Authority (SDCRAA) have conducted numerous studies on where to build a new international airport to better serve San Diego's growing air transportation needs. The most thorough of these studies is the 2006 Decision Document created by the Ricondo & Associates Consulting Firm. In this Decision Document a series of potential development sites are sorted and evaluated based on aeronautical, environmental, market, military and financial criteria. Despite tremendous amount of research, a new international airport has yet to be built mainly for political reasons. This research analysis outlines the political nuances of building an international airport in three of the most promising locations identified in the Ricondo & Associates Decision Document. These locations are Marine Corps Air Station Miramar (MCAS Miramar), Campo/Boulevard, and Marine Corps Base Camp Pendleton (Camp Pendleton).

Figure 1: Map of San Diego & MCAS Miramar



Source: Microsoft Map Point, 2013

A. SDCRAA (San Diego County Regional Airport Authority)

The SDCRAA was created on January 1st, 2001 by the California State Assembly Bill AB 93. Prior to this, air traffic planning in San Diego County was controlled by SANDAG (San Diego Regional Planning Agency). The SDCRAA is governed by a board of nine individuals who represent San Diego's nine districts. Three of these people serve as the Executive Committee. The Airport Authority has public meetings at 9:00 AM on the first Thursday of every month in the Commuter Terminal of Lindbergh Field.

The goal of the SDCRAA is to manage airports within San Diego County and to meet the long term air traffic needs of San Diego County as a whole. SDCRAA is funded entirely through user fees, and no tax dollars are allotted to this organization. If an international airport is built in San Diego County, it will be the SDCRAA who arranges its citing, financing, planning, construction and operation. The SDCRAA will also issue the bonds needed to pay for the development of the airport. Other local, state, and Federal agencies have the ability to obstruct this project in various ways. Understanding who these organizations are, what motivates them, and what powers they possess is the key to making an airport project work.

B. FAA (Federal Aviation Administration)

The FAA is a Federal agency dedicated to improving the safety and efficiency of aviation in America. They have a series of requirements which must be met before any airport can be constructed in the US, and they study all new airport proposals carefully to make sure they are in compliance with these standards. It is important for this organization to remain strict and impartial because often local business communities will try to "rush" development of an airport

for financial gain without stopping to consider the safety or long-term consequences of the project.

The FAA looks at several things when deciding whether or not to allow development of a new airport. These considerations include the impact of aircraft noise on local communities, geographic and meteorological hazards, ease of access and departure, storage of fuel and equipment, traffic capacity restrictions, and similar issues. The FAA is a national organization and has no political stake in whether or not an airport gets added to San Diego. If the correct process is followed and it is determined that San Diego wants a new airport, then the FAA will perform its duties for each development scenario. Without the blessing of the FAA, a new airport cannot be built in San Diego.

Section I: MARINE CORPS AIR STATION MIRAMAR

A. History

MCAS Miramar was founded in 1917 during World War I by the US Army as a facility to train infantrymen. At this time, the site was called Camp Kearny. During World War II the site was renamed Camp Elliott and used as a training and operations center for the 2nd Marine Division, tasked with defending the California coast. In 1940 new runways were constructed and the 1st Marine Air Wing was stationed there, and later in 1943 the Navy created an auxiliary air station nearby to train crewmen for patrol bomber planes. Shortly after, the Marines added an air depot nearby and renamed it MCAS Miramar to avoid confusion with the neighboring Navy facility. The Marines were moved offsite to Orange County in 1947 and the Navy transformed Miramar into a school for fighter pilots (See Figure 2).

In 1999 when the BRAC (Base Realignment and Closure) commission closed bases in El Toro and Tustin the 3rd Marine Aircraft Wing was transferred to Miramar and the Navy was moved offsite. The BRAC commission transferred training of fighter pilots from Miramar to a base in Florida in 2005. All fighter pilot training at Miramar will be phased out by 2015. In 2006 San Diego County Proposition A proposed obtaining 3000 acres of land at Miramar to build a commercial airport. The proposition was defeated by 62% of opposed votes to 38% in favor (Shettle, 2013). The reasons are detailed in the Public Opinion section.

B. Major Political Barriers

i. Marine Corps

The US Marine Corps is a division within the Department of the Navy responsible for amphibious and expeditionary warfare. It is the smallest of the United States Armed Forces and accounts for 6% of the US annual military budget. In San Diego the First Marine Expeditionary Force is based in Camp Pendleton and MCAS Miramar, while the Navy occupies facilities in Coronado, Point Loma and North Island. The forces stationed at MCAS Miramar comprise the 3rd Marine Aircraft Wing (made up of 43 squadrons). In 2006, the year Proposition A was on the San Diego ballot, the commanding officer of MCAS Miramar stated that a commercial airport at Miramar would negatively impact the mission of the U.S. Marine Corps (Caughlan, 2006). The Secretary of the Navy also stated that a commercial airport at Miramar would harm Navy and Marine readiness.

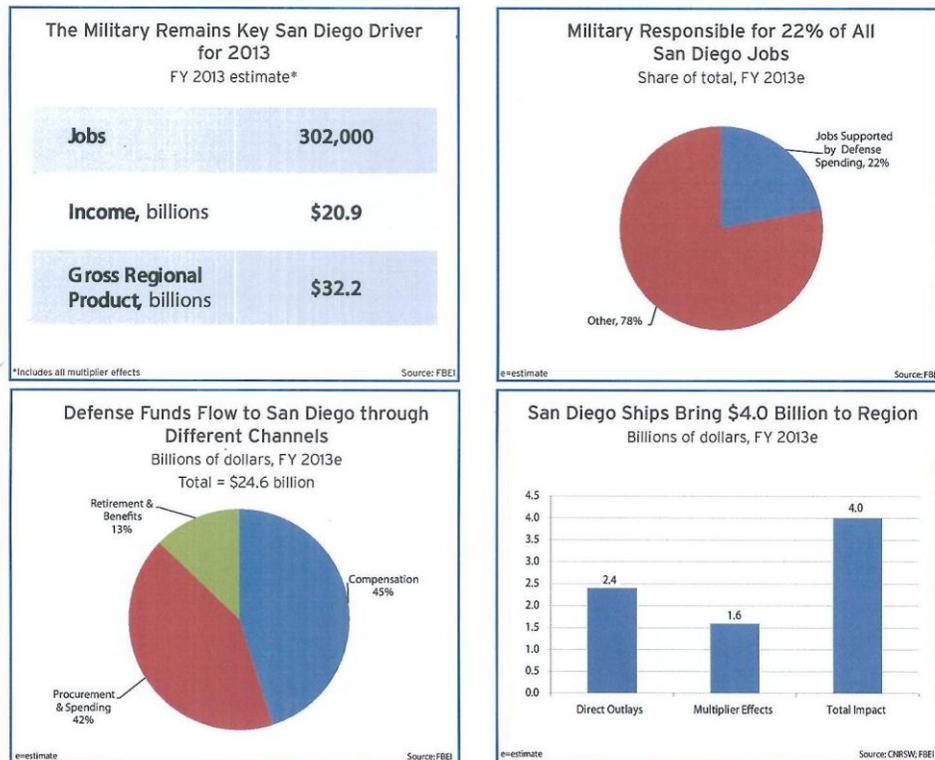
Figure 2: Historic Aerial Photo of NAS Miramar



Source: National Naval Aviation Museum

An estimated \$20.9 billion in direct spending related to defense has been sent into San Diego County during fiscal year 2013 – an amount equal to about \$7800 for each of the county’s residents (Fermanian, 2013). Indirect spending on defense contracting, benefits payments and military-related tourism bring this Figure closer to \$24.6 billion (Johnson, 2013). Money enters the local economy in the form of wages, contracts, grants, tourism, etc. Camp Pendleton also saw \$87 million of approved construction in 2013, while Miramar received nearly \$28 million. The military sector is responsible for about 302,000 of the regions total jobs as of 2013 – 22% of the jobs in the county (Fermanian, 2013). An overview of San Diego military spending for 2013 is included in Figure 3 below.

Figure 3: Military Spending in San Diego in 2013



Source: San Diego Military Advisory Council. (2013). Military Economic Impact Study. Retrieved at http://www.sdmac.org/uploads/docs/Executive_Summary_5th_Annual_SDMAC_Military_Economic_Impact_Study.pdf

These factors give the Department of the Navy a great deal of political power in San Diego County. A substantial portion of the voting populace supports the Navy and Marines because they owe their livelihood to the military. In 2006 when San Diego Proposition A was defeated, the military spending associated with MCAS Miramar was partially responsible (SDMAC, 2013). In recent years the United States has seen substantial cutbacks in military spending. For example, military spending in 2012 accounted for 25% of all jobs in San Diego, while in 2013 it now accounts for only 22% (SDMAC, 2013). In 2014 with continued military withdrawal from Afghanistan, military sector jobs in San Diego may drop to 295,000 (Johnson, 2013). If this trend continues in ensuing years, then the economic influence of the military over San Diego may wane.

Until the Marine Corps is relocated from MCAS Miramar to another site, it is impossible to build an international airport there. The Marine Corps has a large amount of support from the public because military spending accounts for a large percentage of the jobs in San Diego. As

time progresses, this spending may decrease and with it the Marine Corps' influence over the voting public may decline (Bilbray, 2013).

ii. San Diego City Council

San Diego's City Council is composed of nine individuals representing the nine districts of San Diego. They are all politicians elected by voters of their respective districts, and are obligated to represent the interests of these voters. If any issue is brought before the council, they respond by gathering as much information as possible on the issue and then holding a vote. If the issue is controversial (like an international airport), City Council will pay for professional studies to be conducted and make the results of these studies available to the public. The issue

will then be added to the ballot so citizens can vote on the matter.

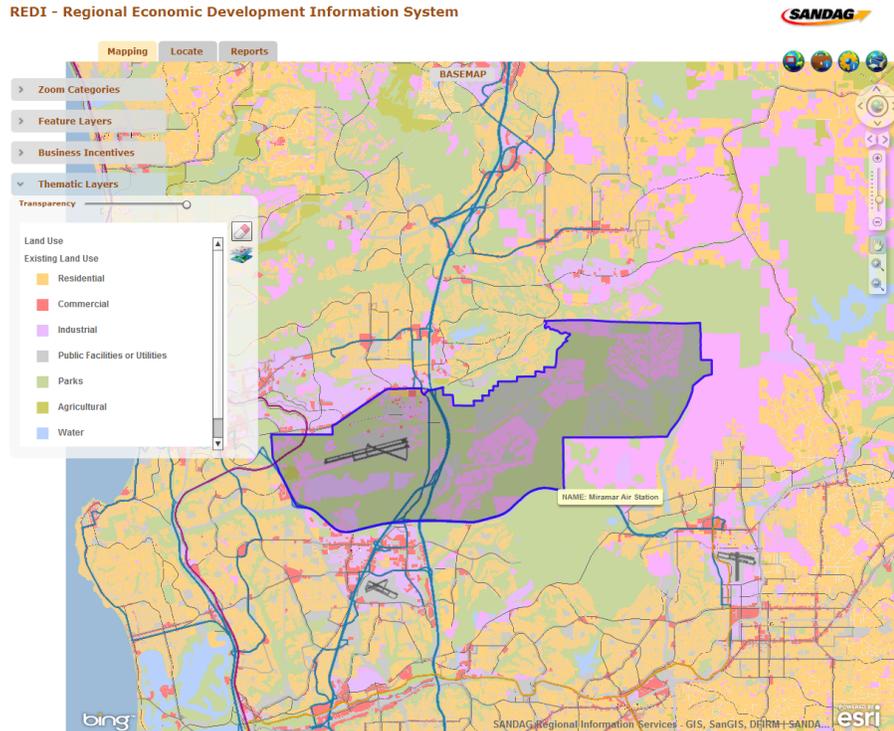
Under normal circumstances, City Councilmembers will do what the public majority wants them to. While they are not obligated to reflect the public's wants, failure to do so can make them unpopular and result in a Councilmember being voted out of office (Uke, 2013).

The San Diego City Council possesses local land use authority, meaning they are able to re-zone

regions of the city for various uses. If land within their jurisdiction is not zoned to allow for an airport, then it is illegal to build an airport in that location. Further, the results of Proposition A on the 2006 ballot averted the possibility of an international airport to be built at Miramar. The land in question is shown above in Figure 4. Even if the Federal Government could be convinced to relinquish the land at Miramar to the city, the City Council could refuse to re-zone or issue permits for the project (Bilbray, 2013). According to local regulation, developing an airport in San Diego is not voted on by the county. Instead only each city and its registered voters are allowed to decide whether or not an airport can be placed within their city, but this is not the case with some other developments. For example, local land use authority can be preempted by State and Federal Governments for the development of highways. As long as the City of San Diego remains a "500 pound gorilla" with the power to kill airport projects within its borders, no international airport can be developed within this region unless the public wants it.

Figure 4: MCAS Miramar Land Use Map

REDI - Regional Economic Development Information System



Source: SANDAG Regional Economic Development Information (REDI) System. (2013). Accessed at <http://redi.sandag.org/>.

Local land use has no state law which supersedes the City of San Diego local land user authority (Bilbray, 2013).

Proponents of developing an international airport in San Diego believe that land use authority for airports should be consolidated at the county level. Supporters of this idea also believe that because an international airport would service and benefit the entirety of San Diego County it should be up to the county as a whole whether or not it gets implemented. By allowing the issue to be voted on by a much larger demographic, it is more likely the ballot will show a favorable result. Implementing this change would require legislation at a state level (Bilbray, 2013).

In 1994 an attempt was made to conduct a public vote in favor of a new international airport in San Diego County. Shortly after the Navy left Miramar Military Base, voters passed Ballot Measure 52-48 to allow the region's international airport to move to this new site should it become available (Jenkins, 2006). San Diego Mayor Susan Golding and Rep. Randy 'Duke' Cunningham opposed this initiative and helped the Marine Corps move into Miramar instead. The measure did not pass within the City of San Diego, but at this time it drew majorities of 60% or more in six North County cities (Ristine, 2006).

iii. Federal Government/Congress

The United States Congress is made up of two houses: the House of Representatives and the Senate. There are 435 Representatives and 100 Senators, respectively. The members of Congress form committees to intensely study specialized subjects and then advise the entirety of Congress on the pros and cons of each action before a decision is made. Committees write legislation, and it is rare for the House to generate or pass bills without action from the relevant committee. If Congress is asked to relinquish Federal land to the State for a new international airport, it will rely on the advice of two committees to do so. The first of these is the House Subcommittee on Aviation, which falls under the House Committee on Transportation and Infrastructure. The second is the Senate Subcommittee on Aviation Operations, Safety, and Security, which falls under the Senate Committee on Commerce, Science, and Transportation.

The House Subcommittee on Aviation has jurisdiction over civil aviation as it relates to safety, infrastructure, labor, and international issues. This jurisdiction covers all FAA programs except research. If a request to build an airport on Federal land appeared before Congress, this Subcommittee would convene to discuss commercial aviation, international aviation, aviation safety, and other relevant issues relating to the project (United States House Committee on Transportation & Infrastructure, 2013). The California representative in this subcommittee is Congressman Jeff Denham. Jeff Denham is a strong critic of the high speed rail, and he leads a congressional effort to stop federal dollars from being spent on these projects (Denham, 2013).

The Senate Subcommittee on Aviation Operations, Safety, and Security has jurisdiction over civil aviation, with specific oversight responsibility for the FAA. The Senate Subcommittee on Aviation Operations, Safety, and Security "monitors the FAA's grant making efforts in funding airport infrastructure projects and air traffic control facilities" (US Senate Committee on Commerce, Science, & Transportation, 2013). This Subcommittee also has jurisdiction over domestic aviation security and the Transportation Security Administration (TSA) workforce (US Senate Committee on Commerce, Science, & Transportation, 2013). This Subcommittee is currently led by Democratic Chairwoman Senator Maria Cantwell and her stance on developing new aviation facilities is unknown. The California Representative in this Subcommittee is Barbara Boxer. Senator Boxer is currently an outspoken advocate of reauthorizing Federal highway and transportation spending programs to create new jobs in this industry (Boxer, 2013).

In 1990, the Department of Defense created a commission called BRAC (Base Realignment and Closure). BRAC was developed to save the United States Government money by assessing and closing military bases where they are not necessary. There have been five ‘round’ of BRAC – in 1989, 1991, 1993, 1995, and 2005. Since its inception, BRAC has closed down over 350 military installations. In relation to MCAS Miramar, BRAC determined in 2005 that the fighter pilot training program at the Miramar Base would be completely phased out by 2015 (BRAC, 2005). It is possible that in the future, a new round of BRAC will be implemented to further reduce the military presence in San Diego.

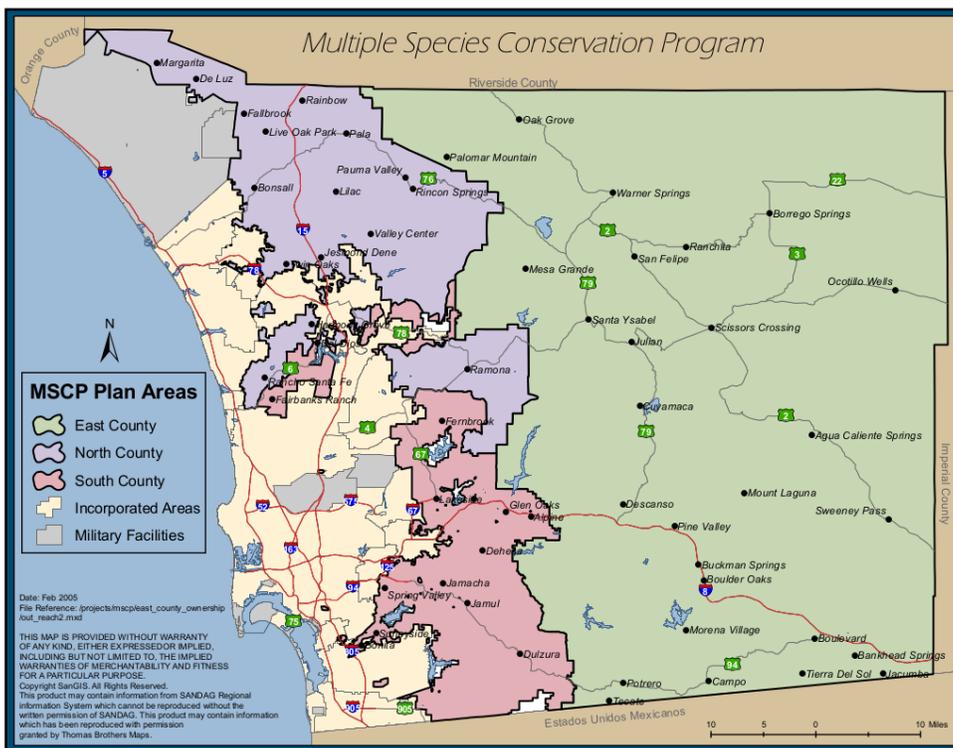
The Marines at MCAS Miramar are currently stationed on land owned by the Federal Government. This land is currently under the jurisdiction of the House of Representatives Armed Forces Committee, which has authority over the Department of Defense (DoD). The DoD holds authority over all branches of the military, including the Marine Corps, which is an organization within the Department of the Navy.

To build an airport on MCAS Miramar, the Airport Authority will need to convince the Federal Government to give the property to San Diego for re-zoning. The Federal Government will not relinquish MCAS Miramar without good cause, and several arguments have already been made against this decision by the Marine Corps, which will be covered in later sections. Successfully transferring ownership of MCAS Miramar to San Diego would require an act of Congress (Bilbray, 2013).

iv. Environmental Restrictions

All of the development scenarios discussed in this document attempt to make use of undeveloped land. Most of this land remains undeveloped because it is protected by laws and programs which preserve local flora and fauna. Within San Diego County there are several such programs. The largest and most important of these is the Multiple Species Conservation Plan (MSCP) for Southwest San Diego County (MSCP, 2010). The MSCP is designed to provide a rubric for balancing development with the preservation of local wild habitats. Put more simply, it exists to protect the native plants, animals, and water resources of San Diego County from the sort of environmental devastation a new international airport would cause. The MSCP is a 278 page document covering a region of approximately 900 square miles (MSCP, 2010). A map of the regions covered by the MSCP is shown in Figure 5 below.

Figure 5: Multiple Species Conservation Program Plan Areas



Source: Multiple Species Conservation Program (2005). *MSCP Plan Areas*. Retrieved from http://www.sdcounty.ca.gov/pds/mscp/docs/mscp_areas.pdf.

On MCAS Miramar, one of the most important endangered habitats protected by the MSCP Plan is the vernal pools (MSCP, 2005). Vernal pools are small landlocked ponds scattered throughout the region which host a variety of endangered plant and animal species.

These pools are fed by rainfall and dry out at certain times of the year, giving rise to species which can survive prolonged periods of flooding or drought. The two most important species within the vernal pools' habitat are the San Diego fairy shrimp (*Branchinecta sandiegonensis*) and San Diego mesa mint (*Pogogyne abramsii*) (Figure 6 and 7, respectively).

Figure 6: San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)



Source: Vandergast, A.G.. (2010). Rapid genetic identification of Southern California Fairy Shrimp Species from Cyst. *United States Geological Survey*. Retrieved from <http://www.werc.usgs.gov/Project.aspx?ProjectID=173>.

Both plant and animal species are classified as protected endangered species and the destruction of their native habitat is prohibited by law (California Chaparral Institute, 2004).

The MSCP document has several open-ended definitions which allow agencies tremendous flexibility. The section applying to vernal pools allows for their removal as long as all parties try to minimize environmental impact. Section 3.3.3 states, "...for vernal pools and narrow endemic species, the jurisdictions and other participants will specify measures in their subarea plans to ensure that impacts to these resources are avoided to the maximum extent possible" (MSCP, 2005). This section is open to interpretation and allows agencies to define the meaning of "maximum extent" (California Chaparral Institute, 2004).

The vernal pools located on MCAS Miramar are some of the last remaining habitats of this kind in Southern California. A sample image of such a pool is included in Figure 8 above. The pools are currently protected by the Marine Corps occupation of the site, but if the Marines

Figure 8: Miramar Vernal Pool



Source: California Chaparral Institute. (2004). *Vernal Pools: Liquid Sapphires of the Chaparral*. Retrieved from <http://www.californiachaparral.com/vernalpools.html>.

sensitive wetlands totaling 95 acres (San Diego County Regional Airport Authority, 2006).

Figure 7: San Diego Mesa Mint
(*Pogogyne abramsii*)



Source: California Chaparral Institute. (2004). *Vernal Pools: Liquid Sapphires of the Chaparral*. Retrieved from <http://www.californiachaparral.com/vernalpools.html>.

are relocated by an act of Congress, Section 3.3.3 of the MSCP would allow the City of San Diego to circumvent this prohibition and build over the vernal pools fairly easily. Destruction of the few remaining vernal pools in San Diego County is a hotly debated ethical issue anticipated to elicit a severe reaction from local environmental groups. According to the Ricondo & Associates 2006 Decision Document, construction of the MCAS Miramar footprint will permanently impact seven

According to former Congressman Brian Bilbray, the largest challenge to building an airport at Miramar is the environmental regulations by mitigating the vernal pools where the Mesa Mint grows. He states that the area is "a seasonal wetland in a low depression which fills up with water in the winter time". He continues, "...the Fairy Shrimp and the Mesa Mint are on the endangered species list. Anything [done] would require a mitigation plan for that area before

you can put in a runway. You also need to raise the issue that development to the east does not encroach. The approach pattern has to be protected." The details of such a mitigation plan would require extensive research to resolve (Bilbray, 2013).

Environmental protection laws exist on a State and local level. In many cases they overlap, but all must be satisfied before a construction project with the potential to threaten endangered species and habitats can begin. The California Department of Fish and Wildlife manages resources for the State. The San Diego Department of Fish and Game manages the same resources for San Diego County. Normally these two organizations agree on policy, but this is not always the case. It is possible for the California Department of Fish and Wildlife to forbid the development of a new airport at MCAS Miramar even if the local Department of Fish and Game allows it (Bilbray, 2013).

For over twenty years, the Department of Fish and Wildlife held up development of the Jonas Salk Elementary School in Mira Mesa because vernal pools were discovered at the construction site. The Fish and Wildlife Service required the district to perform mitigation for fairy shrimp and other species that thrive in the vernal pools before the project could proceed. Historically, the Fish and Wildlife Service has argued that vernal pools cannot be artificially constructed, but a vernal pool habitat re-introduced itself into the graded pad for the school while the contractors waited for funding. It is possible for vernal pool habitats to be recreated, considering it occurred at Jonas Salk Elementary School without planning. Experts suspect the fairy shrimp eggs blew in from an adjacent region and took root there, or tracked into the region on the boots and tires of the construction workers. Development of the school was finally sanctioned in September of 2013 (sandiego6.com, 2013).

Figure 9: Land Acquisition Summary

	Acres
Total Airport Site Boundary	2,794
Land Acquisition by Property Type	
Residential	-
Commercial	17
Industrial	76
Agricultural	-
Mining	76
Religious Facility	-
Military	2,215
Transportation/Other	492
Undeveloped	61
Total Land Acquired	2,861

Source: San Diego County Regional Airport Authority, 2006

C. Additional/Unique Issues

i. Relocation of Existing Establishments

The footprint for the MCAS Miramar airport requires acquisition of 2,215 acres of military land plus an additional 700 acres of other lands. As of 2006, these additional sites bring total airport footprint to 2,861 acres. Figure 9 shows a land acquisition summary for the project.

The footprint for the MCAS Miramar airport also requires relocation of the 3rd Marine Aircraft Wing. The 3rd Marine Aircraft Wing is made up of squadrons who pilot a collection of transport planes, bomber planes, and fighter jets (MCAS Miramar, 2013). Successfully dispersing the 3rd Marine Air Wing will require decommissioning or relocating these aircrafts. Potential sites for relocation include NAS Lemoore, MCAS Iwakuni, NAS Atsugi, MCAS Beaufort, or MCAS Yuma (Meyer, 2003).

ii. Public Opposition

There are several reasons why the proposition to build an airport at Miramar was voted down in the 2006 ballot. Those who lived close to Miramar were afraid that the airport would create high levels of noise, traffic, and congestion near their homes. Residents whose family income stems from the Marine Corps were concerned that moving the Marines offsite would force them to leave San Diego or deprive them of their livelihood. Other environmentally concerned citizens objected to the airport because the footprint for the proposed runway encroached on land protected by the MSCP Plan developed by SANDAG, Wildlife Agencies, and the San Diego Board of Supervisors in 1998. Finally, the citizens of the City of San Diego are resistant to change because they are uninformed and fear the unknown. To most citizens, Lindberg Field is adequate for their personal travel needs because it is close and convenient. They do not consider the long term implications of a larger airport on things like ticket cost, freight cost, economic growth, and so forth because these things do not directly and visibly influence them (Bilbray, 2013).

In a perfect scenario, all citizens want to be close enough to the airport for convenience but far enough away that noise, environmental changes, and traffic do not inconvenience them. This is why the voting populace of San Diego rejected the 2006 Proposition A to develop an airport at MCAS Miramar. Proposition A lost in all eighteen cities and the remaining unincorporated area, gaining just 38% of the overall vote, but it received the lowest percentages in regions closest to the airport footprint (Ristine, 2006). The communities bordering MCAS Miramar in the 1st District drew less than 28% support, while the 5th District gained less than 22% of the vote. The City of Santee, which lies beneath the approach path to MCAS Miramar, also rejected the vote with only 25% in favor of the measure (Ristine, 2006).

Meanwhile regions that were outside the flight path of the new airport but close enough to benefit from reduced travel time viewed the proposition more favorably. North County cities such as Carlsbad and Encinitas were 49% in support, San Marcos was 46% supportive, Oceanside was 45% in favor, and Vista showed 44% support. Interestingly, Districts 2 and 8 showed 46% and 47% support for the proposition despite the fact that many neighborhoods in these districts are adjacent to Lindberg Field. This implies that for many of these citizens the benefit of not being next to an airport trumps the convenience of having one close by.

iii. SANDAG

Since its inception the San Diego County Regional Airport Authority (SDRAA) has held jurisdiction over airports in the region. Before the SDCRAA, this authority was held by the San Diego Regional Planning Agency (SANDAG). Bilbray believes that SANDAG has "no authority on this matter from a state point of view, but they still possess federal land use oversight authority." This means SANDAG has regional land use oversight but no longer possesses airport jurisdiction. If it wished to do so SANDAG could oppose development of an airport at MCAS Miramar based on regional impact, despite the fact that they lack the authority to determine what gets built and what doesn't (Bilbray, 2013).

iv. Miramar Landfill

The Miramar Landfill was opened in 1957 and is currently the City of San Diego's only active landfill. It is lined, environmentally secured, spans over 1500 acres, and nearly 910,000 tons of waste are disposed of at this location annually (City of San Diego, 2013). According to former Congressman Brian Bilbray, there are FAA regulations prohibiting landfills next to airports and the Miramar landfill may need close in order to run a commercial airport at that location. After the Hudson River Crash, the FAA worries about seagulls getting caught in the jet intake engines of passenger planes. The Hudson River Crash happened because geese got caught in the engines. This is a standard that has been around a long time. Separation between landfills and commercial airports is vital. Even if the FAA could be satisfied it is likely the airlines would refuse to utilize the site for safety and insurance reasons until the landfill issue is resolved (Bilbray, 2013).

v. Political Synergy

Building an international airport at MCAS Miramar is like building an electronic circuit. All the political connections must be made or the whole thing will not work. For this site, that means the Department of Defense, San Diego City Council, the Department of Fish & Wildlife, the FAA, and the cities impacted by the project must all be brought into alignment. Following that, a source of funding must be obtained. Getting all these things done requires an action plan, but it begs the question whether this project is worth the effort in light of all the obstacles present. Other sites have considerably fewer political obstacles. Below is a brief overview of what the MCAS Miramar footprint entails.

Satisfying the military and government will require negotiation with the Marines themselves, the Department of Navy, and the Department of Defense. It is likely these groups will need to be compensated for the land and the hassle of relocating. Then the issue must be brought before Congress and added to a bill. As long as national security is not compromised and a strong argument can be made for relocating the marines it is possible that MCAS Miramar could be targeted by a future round of BRAC closures. If this happened, it is likely Congress would put MCAS Miramar up for auction and sell the land to generate much needed revenue.

Because military spending represents a large portion of San Diego's economy, an alternative plan to increase San Diego business would also need to be presented to Congress to make up for lost revenue. If a good argument can be made showing that the international airport will generate sufficient tax revenue it is also likely the FAA would supply some of the money to build the airport itself. The FAA would NOT pay for infrastructure changes to the city outside the footprint of the airport however.

San Diego City Council will do whatever the voting public wants them to do. Their job is to gather large amounts of information, assess it, and then make decisions concurrent with the public good. Getting City Council to re-zone the land will require campaigning to the public to gather support. MCAS Miramar is already seeing major cuts to funding and their fighter pilot training program will be phased out by 2015. If the base is targeted by BRAC and a compelling plan to galvanize the San Diego economy is offered up to supplement the loss of military income it is likely that public opinion would shift in favor of the project.

The vernal pool habitat at MCAS Miramar would likely be destroyed by development of a new local airport. Fortunately it has recently been proven at the Salk Elementary School construction site that vernal pool habitats actually can spontaneously regenerate and be artificially replicated. With funding and a strong mitigation plan to recreate vernal pool wetlands

elsewhere, it is possible to satisfy the Department of Fish and Wildlife. Given that this is a long term multi-billion dollar project, putting up the money to create a good mitigation plan and build some wetlands elsewhere is likely to be trivial. Whether artificial wetlands can actually be replicated is another story, but the Salk Elementary School incident is worth looking into.

The Miramar Landfill may need to be moved before the airlines will agree to fly to Miramar. Even if they do agree it is likely the FAA will demand action to mitigate the threat of having seagulls sucked into passenger jet turbines. Creating a plan to develop another landfill elsewhere may resolve this problem. Alternately there may be technologies or waste disposal techniques which make this a non-issue. If no such techniques exist it may benefit San Diego to invest in some.

Section II: CAMPO/BOULEVARD

A. History

There are six areas in the Mountain Empire Subregion. Campo and Boulevard are two of them. The six regions are Tecate, Potrero, Campo, Jacumba, and the remainder of the plan area. These regions have unique identities but they are similar in characteristics such as topography, water resources, and native species (MESRP, 2011). As it is shown in the Figure 10, the green arrow indicates the location of the CBS Campo/Boulevard Site.

Figure 10: CBS Campo/Boulevard Site Location on Google Map



Source: Google Maps, 2013

Campo is a small community located in the mountain empire of southeastern San Diego County. It is one of three clusters of the Campo/Lake Morena Subregional Group Area, which consists of Campo, Lake Morena and Cameron Corners. This region has been partially developed since 1906 when the San Diego and Arizona Eastern Railway Company tried to develop a direct rail link to the east by connecting with the Southern Pacific Railroad in El Centro. This project was called the Impossible Railroad by engineers of the era because of extreme logistical challenges. Before going bankrupt, the rail line was built into Mexico before crossing back into the USA between Ducati and Campo (Bilbray, 2013). As of 2010 the population of this region stands around 2600 people.

Boulevard is another small community in the mountain empire and it is located just next to Campo. This region has long Native American history with rich and valuable cultural and archeological resources. The earliest inhabitants of this region were Kumeyaay and Cocopah Indians (NCAI, 2010). The headquarters of the Manzanita Band of Diegueno Mission Indians are located near Boulevard region today (Eargle, 1992). Before the construction of Interstate 8, the Boulevard Subregional Group Area was a linear highway oriented community. Now the

orientation has been changed because of Interstate 8 (MESRP, 2011). As of 2010 the population of this region was 315 people (United States Census, 2010).

B. Major Political Barriers

i. Remote Location

The CBS Campo/Boulevard site is located 69 miles east of San Diego's central business district. It is also 66.4 miles from Campo to Mira Mesa (San Diego County Regional Airport Authority, 2006). It takes one hour and seven minutes by car to drive from Mira Mesa to Campo/Boulevard under normal traffic conditions. The local landscape is rocky and covered with chaparral vegetation. With little residential development this site offers nearly unlimited room for expansion, but opponents of this site claim the remote location is a major deterrent (San Diego County Regional Airport Authority, 2006). Driving to the Campo/Boulevard site takes residents of northern San Diego County just as long as the drive to Los Angeles International Airport. With a total population of roughly 3.2 million people, an airport built at Campo/Boulevard would only be convenient to around 2 million local residents. A population center this size justifies a local airport, but not a major international transportation hub (Bilbray, 2013).

ii. Solar/Wind Energy Corridor

California has mandated that by 2020, 33% of San Diego energy must come from renewable resources. In January of 2013 an alliance of green energy companies moved into Campo to build a network of solar and wind farms. These companies are Iberdrola's Tule Wind (15,000 acres), Invenergy's Shu'luuk (4739 acres), and Enel's Jewel Valley (8000 acres) (Braun, 2013). Local residents objected to this development but all attempts at legal opposition were thrown out because the development was sanctioned at a federal level. The Boulevard Community Plan forbids construction of industrial-scale projects, but renewable energy projects such as wind and solar are not legally classified as such. Local residents believe the federal government plans to turn Campo into an "energy corridor" for San Diego with no regard for how this will impact small rural communities like Campo and Boulevard. In this regard they are absolutely correct. Sustainable clean energy is a growing priority for the federal government, and the environmental benefit of these projects is assumed to justify the displacement or discomfiting of small rural towns (Braun, 2013). It is not possible to develop an international airport on land filled with 300 foot tall wind turbines and giant solar arrays. The impact of these green energy projects on local zoning and land use must be evaluated before the airport project can proceed (Braun, 2013). A sample image of this energy project is depicted in Figure 11 below.

Figure 11: Wind Energy Turbines in Mountain Empire Sub-Region

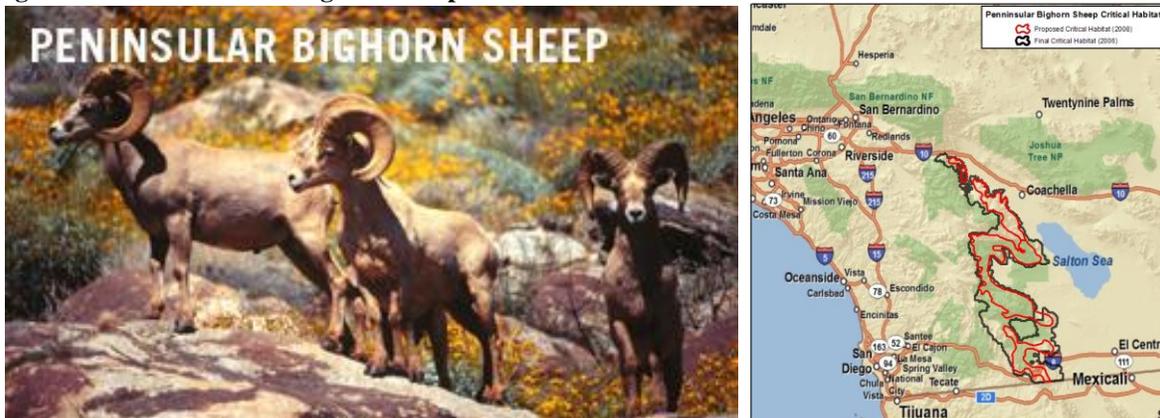


Source: Rosen, Howie

iii. Environmental Restrictions

The environment in the Campo/Boulevard area is protected by a document called the Mountain Empire Sub-Regional Plan (MESRP). This document requires that development in the area not change land formations or destroy the natural resources of the sub-region. The two primary endangered species protected by this plan are the Quino checkerspot butterfly (*Euphydryas editha*) and the Peninsular bighorn sheep (*Ovis canadensis cremnobates*) (See Figure 12) (Iberdrola 2010).

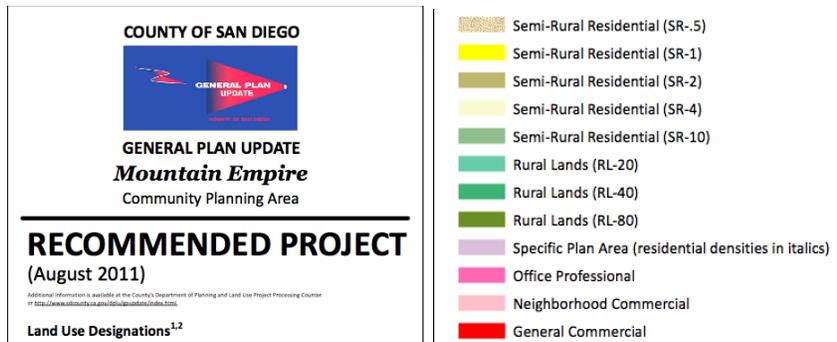
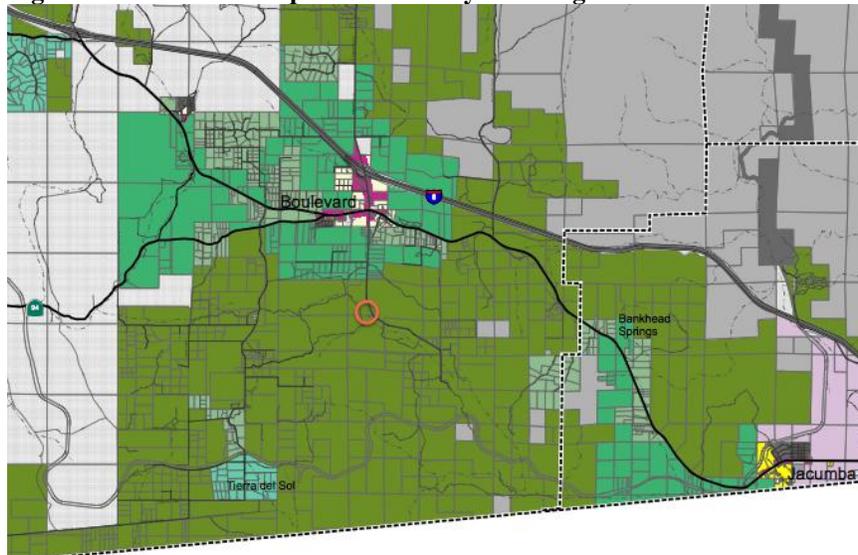
Figure 12: The Peninsular Bighorn Sheep and Their Critical Habitat



Source: Center for Biological Diversity. (2013). *Saving the Peninsular Bighorn Sheep*. Retrieved at http://www.biologicaldiversity.org/species/mammals/Peninsular_bighorn_sheep/.

The plan also includes a policy requiring all development proposals within "rural village boundaries" to avoid removal of mature trees. The current footprint for the proposed airport falls within a region classified as a "rural village" (See Figure 13). The footprint for the proposed airport is located in a rocky and diverse region filled with chaparral and mature local trees (San Diego County Regional Airport Authority, 2006). The proposed Campo/Boulevard project is not currently compatible with the Mountain Empire's land use policy. The Boulevard region has substantially fewer environmental protection laws however, since the Iberdrola solar energy company successfully lobbied to remove most of these restrictions from the Boulevard Community Plan in 2011 to allow development of multiple industrial wind and solar energy facilities in the region (Raftery, 2013).

Figure 13: Mountain Empire Community Planning Area



Source: County of San Diego, 2011

The Campo/Boulevard region also contains several archaeological and historical sites which are legally protected from the sort of change a project of this magnitude entails. The McCain Valley is located only 17 miles northeast of the Campo site directly off the interstate 8 freeway and adjacent to the turnoff to highway 94, the largest and best developed road leading to Campo. McCain Valley is a national heritage site and it is regarded as sacred by Native Americans throughout the region. It is also considered a gateway to three federal wilderness regions currently protected by the Bureau of Land Management. Developing roadways and transportation infrastructure in this region must be cleared with the Bureau because of the high probability that these regions will be negatively impacted by the project. According to the Ricondo & Associates Decision Document, the Campo/Boulevard airport footprint will substantially impact three highly sensitive wetland communities totally 18.6 acres (San Diego County Regional Airport Authority, 2006).

iv. Native American Indian Reservation

There is a Native American Indian reservation in Campo. This reservation is inhabited by a local tribe legally referred to as the Campo Band of Mission Indians. The tribe has recently entered into an agreement with the Bureau of Indian Affairs (BIA) and the Environmental Protection Agency (EPA) to allow a large wind energy farm called the "Shu'luuk Wind Project" to be built on reservation land (Washburn, 2012). Whether the tribe would allow development of an international airport so close to their land is currently unknown. The development of an international airport at Campo would require dialogue with the tribe, the Bureau of Indian Affairs, and the consortium of wind and solar energy companies currently working to develop a green energy corridor in Campo. The airport footprint has the capacity to affect any or all of these parties (Washburn 2012).

C. Additional/Unique Issues

Figure 14: Land Acquisition Summary

Source: San Diego County Regional Airport Authority, 2006

i. Relocation of Existing Establishments

Building an airport in the Campo footprint will require the relocation of 77 households, 89 farms, and one non-profit organization. Given the regions already small population this will upset most of the locals. It is often assumed that residents of rural areas are pleased to hear about new local development because

	Acres
Total Airport Site Boundary	4566
Land Acquisition by Property Type	
Residential	1174
Commercial	200
Agricultural	5014
Religious Facility	-
Military	-
Transportation/Other	-
Undeveloped	16
Total Land Acquired	6404

it will boost the growth of their economy. In the Mountain Empire Sub-Region this is not the case (Raftery, 2013). A large portion of the local populace chooses to live in Campo because it is rural and because they find the natural undeveloped environment appealing. Evidence of this can be seen in the response of locals to the recently development of a "green energy corridor" in the Campo region (see Solar/Wind Energy Corridor). The Campo/Boulevard airport footprint requires acquisition of 5014 acres of agricultural land as well as residential and commercial property. As of 2006 these additional sites bring total airport footprint to 6,404 acres. Figure 14 shows a land acquisition summary for the project.

ii. Utilities

Building a new airport in a remote and poorly developed region requires a great deal of infrastructure. The San Diego Gas & Electric Company currently maintains a 69-kilovolt overhead transmission line into the region. This line runs through the middle of the airport footprint. Before construction can begin, SDG&E will need to review all proposed grading, improvements, and other encroachments to the substation and transmission right-of-ways (MESRP, 2011). Then facilities will need to be added to service the new airport and surrounding region. This is considerably more complicated than other airport scenarios based closer to

heavily populated regions. It is possible to mitigate this energy requirement by utilizing local solar and wind power (see Solar/Wind Energy Corridor section).

The Campo region has poor water resources. If a new airport is built in this sub-region it will attract new businesses and residents to service the area. This increased habitation will inevitably consume large amounts of ground water. Creating the infrastructure to transport water from the Colorado River into this area is also considerably more complicated than other airport scenarios based closer to heavily populated regions (MESRP, 2011).

iii. Maglev Trains

A key element of the Campo/Boulevard development plan is the construction of a high-speed maglev rail to ferry new arrivals directly from the airport to more populated areas of San Diego. Given the small region this railway proposes to serve, it is considered to be cost prohibitive. According to news articles from 2006 it would cost \$5.9 billion to build an airport at MCAS Miramar, \$5.7 billion at NAS North Island, \$6.2 billion at Camp Pendleton, \$17.4 billion in the Imperial County desert, and \$16.6 billion at the Campo/Boulevard site (Tillman 2006). The predicted cost of building a maglev train to connect Campo with Mira Mesa will be more than \$20 billion. No airport with this high of a cumulative cost has ever been built in the United States. Because San Diego County taxpayers would not agree to take this on financially, the project's expense would be passed on passengers using the airport – amounting to about \$100 per plane ticket (Carson 2006). Between the fee and the remote location of the airport, it is likely the Campo/Boulevard airport site would have a negative impact on travel and tourism (Carson 2006).

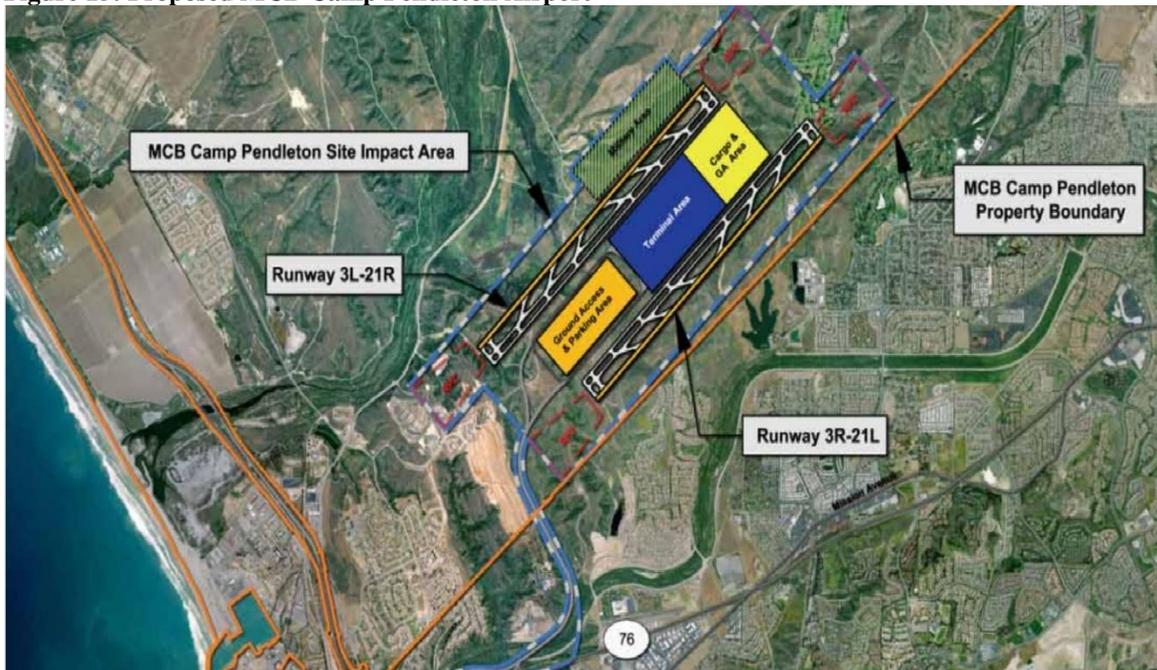
Section III: MCB CAMP PENDLETON

A. History

MCB Camp Pendleton was founded in 1942 as a training ground for amphibious forces to meet the manpower needs of World War II. By 1944 it became a permanent installation and in 1946 it was permanently staffed by the 1st Marine Division. During the Korean War Camp Pendleton trained over 200,000 marines to fight in Asia. In the 1980's Camp Pendleton saw the addition of tanks, planes, and helicopters. Today the site has over 2600 buildings and over 500 miles of roads. It stands today as the United States Marine Corps largest west coast military base (United States Marine Corps, 2013).

The 2,853-acre Pendleton site is approximately three miles south of the existing Marine airfield, and utilizes less than 2.3% of the entire base area. Under the proposed joint-use plan, two 12,000 foot-long runways would be staggered and aligned parallel to the existing military airfield, separated by 4,300 feet to provide dual approach capability in all weather conditions (San Diego County Regional Airport Authority, 2006). A central terminal area would be located between the runways with ground access and parking facilities for civilians, though civilians would not have access to the rest of the base outside the site area. The existing airfield would continue to function as the primary military airfield, while the new runways would be primarily for civilian purposes (see Figure 15 below). The military will continue to manage air traffic at its existing military airfield, while the FAA would manage air traffic at the new joint use airfield.

Figure 15: Proposed MCB Camp Pendleton Airport



Source: Ricondo and Associates, 2006

B. Major Political Barriers

i. Marine Corps

In 2006 the officers of MCB Camp Pendleton were adamantly opposed to developing a joint use international airport near the base. The reasons for this were similar to those of MCAS Miramar.

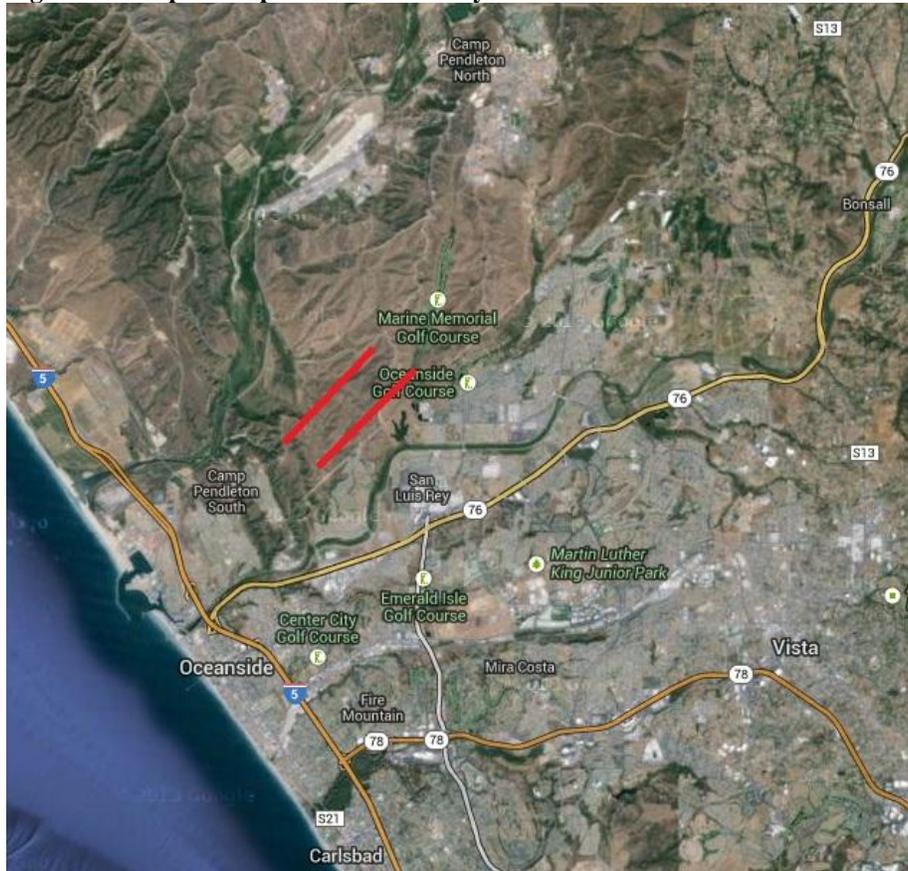
ii. Oceanside City Council

North County has supported an international airport on two occasions. The first occurred in 1994 when the Navy left Miramar and offered the land to San Diego. At this time San Diego voters passed measure 52-48 to allow Lindberg Field to move operations to Miramar if the land became available. Mayor Susan Golding and Rep. Randy ‘Duke’ Cunningham stopped this measure and helped the Marine Corps claim the land instead (Jenkins, 2006). The second occurred in 2006 when Carlsbad (49%), San Marcos (46%), Oceanside (45%), and Vista (44%) expressed a high level of support for Proposition A. It is difficult to attribute this support to the Camp Pendleton airport plan because of the time difference and the fact that in both cases voters were only looking at the MCAS Miramar site. Despite the failure of both initiatives, these results show that there is need and interest for a new airport to serve North County. It is also possible that voters in the Miramar area would be more receptive to an airport in Camp Pendleton because its negative impacts do not affect them as much.

As with MCAS Miramar, the decision to re-zone land obtained from the federal government for a new international airport requires popular support from the residents of San Diego. As with all airport development projects, the drive behind this initiative must be strong and relentless or it will never occur. The major issue here is that the general population of San Diego does not believe a new airport is needed. San Diego International Airport is well liked and conveniently located three miles from downtown or ten miles from the convention center. It consistently ranks high on customer satisfaction as well, with an 87% overall satisfaction rating as of 2010. It has been voted by Conde Nast Traveler magazine’s readers as one of the top ten airports in the nation for five straight years (San Diego Convention Center, 2013). Lindberg Field also recently completed a \$907 million expansion project on Terminal 2 in 2013. To convince City Council to support a new international airport the public must be made aware of how this new project will benefit the city. If the public is serious and passionate about building a new airport, City Council will be more likely to support the project. If there is no pressure on politicians to make such a change, it is unlikely that a coalition of supporters will stick their ‘necks out’ for something voters do not feel is necessary. One of the central issues with building a major airport is that support from the local community is needed to make it happen. Unfortunately the local community suffers the highest level of negative consequence from the new airports presence.

The Camp Pendleton footprint was carefully planned to limit the number of communities in close proximity to the airport. Unlike the Miramar site which is surrounded by highly populated areas to the north, south, and west, the MCB Camp Pendleton site has only one populated border to the south. With its two parallel runways running northeast-southwest (colored red in Figure 16), the flight path for take-off and landing will not travel over a single city. Instead inbound and outbound flights pass over the Pacific Ocean or undeveloped portions of Camp Pendleton. This is advantageous because it limits the number of local citizens who will oppose the airport project.

Figure 16: Map of Proposed Dual Runways



Source: Google Maps, 2013

iii. Federal Government/Congress

Like MCAS Miramar, the Marines at Camp Pendleton are currently stationed on land owned by the federal government. This land is currently under the jurisdiction of the House of Representatives Armed Forces Committee, which has authority over the Department of Defense (DoD). The DoD holds authority over all branches of the military, including the Marine Corps, which is an organization within the Department of the Navy. In addition to opposition from ranking officers at MCB Camp Pendleton, all airport proposals and land acquisition requests must go through Congress before the land can be obtained. Normally this requires that the land grant proposal be put into a bill which is then voted on by both the House of Representatives and the Senate. For a military site as large and important as Camp Pendleton it is also likely the President of the United States must give approval and/or a two-thirds majority vote must be obtained in both the House and the Senate before the land can be turned over for public use. Making such a substantial change to the largest Marine base on the west coast will be a controversial issue.

The 2006 Decision Document for the Airport Site Selection Program states that "Federal law requires that the DoD make military airfields available for civilian activity provided it does not compromise military response, security, readiness, or safety" (San Diego County Regional Airport Authority, 2006). While no official determination from the Department of Defense was obtained, estimates were made based on established criteria and DoD policy. These estimates determined that a joint use airport at MCB Camp Pendleton "would not introduce unacceptable

interference to the military mission, degrade safety, impose security risks, or hamper the DoD in training for and maintaining national defense readiness (San Diego County Regional Airport Authority, 2006). The Department of Transportation and DoD policy on public use of military airfields states:

Joint use of military airfields will be considered on a case-by-case basis when a formal proposal is submitted by a local government agency eligible to sponsor a public airport. Established criteria and good judgment will be used by the Department of Defense when evaluating formal proposals (Secretary of Defense and Secretary of Transportation, 1994).

The criteria used by the DoD to evaluate joint use proposals cover the following categories:

- 1. Airspace/Air Traffic Control**
- 2. Traffic Mix**
- 3. Military Activity**
- 4. Civil Aircraft Equipment/Aircrew Qualification**
- 5. Facilities**
- 6. Security**
- 7. Manpower**
- 8. Financial**
- 9. Environmental**

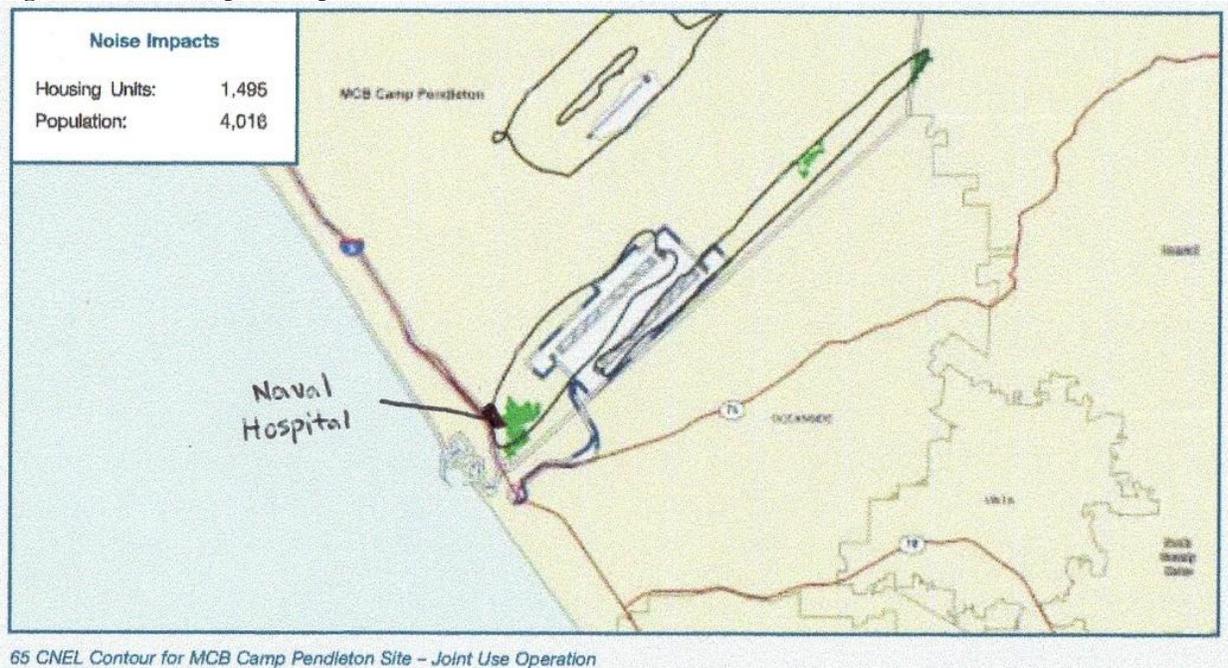
Source: Plan for Joint Use of Military Airfields, 1994

Despite potential challenges and opposition from ranking officers at Camp Pendleton, so long as no problems arise involving these nine criteria a joint use airport at MCB Camp Pendleton is still viable. It is also highly likely that the Marine Corps, Department of Navy, and Department of Defense will require compensation in return for their compliance. At present each of these organizations is strongly opposed to creation of a joint use airport at Camp Pendleton. A lengthy period of negotiation and lots of money would be required to accomplish this goal, but according to Federal regulations it is legally possible.

iv. Environmental Restrictions

According to the Ricondo & Associates 2006 decision document, the airport footprint for Camp Pendleton would permanently impact six sensitive wetland communities totaling 145 acres. San Diego has been ranked among the top eco-conscious cities in the U.S. by several publications. Environmental agencies have considerable influence over land use, but previous studies of the Pendleton location do not appear to show any glaring red flags with the potential to stop the project. The main issue for local residents is the noise impact of a local airport. According to the Ricondo & Associates study of 2006 a total of 1495 residential units (1233 on base and 262 off base) would be subjected to adverse noise by the location of the airport. The majority of these properties are within the airport footprint and would need to be acquired anyway. Adverse noise is measured on a scale called the Community Noise Equivalent Level (CNEL) as mandated by California State Law, with 65 CNEL being the threshold for city, military, and county ordinances. The threshold for an area that already holds a rating of 65 CNEL or higher is any noise level 1.5 times higher than the previous mark. A map of areas impacted by adverse noise can be seen Figure 17 below.

Figure 17: Noise Impact Map



The above map shows a Naval Hospital which was not yet under construction in 2006. This facility is expected to open in early 2014. Located off Vandergrift Boulevard just north of the Wire Mountain Rd., it appears to lie right along the border of the 65 CNEL level and could be impacted negatively by air traffic noise. An additional study would need to be conducted to estimate the consequences of noise pollution in close proximity to the hospital.

Another important environmental issue is air pollution. Airports have an adverse effect on air quality, both from construction and daily operations. Due to the diverse hilly terrain at Camp Pendleton a substantial amount of grading would be needed to level the site. This would lead to high levels of nitrogen oxides (77.3 times the threshold established by the U.S. Environmental Protection Agency) and particulate matter (325.1 times the threshold) during construction (Ricondo & Associates, 2006). These estimates are higher than most site alternatives in the county because of the extra work required to develop the footprint. The thresholds of air pollution are more of a guideline than a hard rule however, and no specific measurement must be made by the airport. After construction finishes the rate of pollution from normal operations is similar to any other airport of similar size in the United States.

Light emissions represent an environmental disturbance with the potential to create opposition to the project. Camp Pendleton hosts frequent nocturnal training missions where darkness is a necessity and additional lighting has a negative impact on training activities. The airport would likely increase local ambient lighting in areas surrounding the base, something the military is likely to oppose heavily. The light emissions will not be great enough to impact local observatories for astronomic research however, and proposed flight patterns keep airplanes with running lights at least five miles away from any local observatory.

According to the MCB Camp Pendleton Integrated Natural Resources Management Plan (INRMP) the airport footprint contains no areas designated for agricultural use. A portion of the site is designated for sheep grazing, but the majority of nearby land also available for grazing mitigates this issue. The footprint does not encompass any farmland, but development is

expected to indirectly impact 183 acres of land designated as Farmland of Local Importance. This obliges coordination with the U.S. Natural Resources Conservation Service to determine the approved level of impact for this project. Furthermore, agricultural or farm activities generating dust or attracting birds are a potential aviation safety hazard. This danger would need to be analyzed and mitigated in such a way that the region and local species remain stable.

A survey of geological, geotechnical, and seismic risk factors conducted in 2006 determined that the Camp Pendleton site is at low risk for groundwater issues, faulting, liquefaction, soils subject to settlement, and tsunamis. The location carries a moderate risk for seismic shaking and a moderate risk for expansive soils which deter excavation. None of these findings represent a major threat to the project, either from preventative regulations or actual disaster occurrence.

Nearly every major construction project has some effect on the local environment. In the case of Camp Pendleton a projected 585 acres of coastal sage scrub and 145 acres of high sensitivity wetlands will be lost, in addition to 226 acres of native grassland. An estimated 29 sensitive plant species occur within the site, including seven Federal or State listed plant species and two SANDAG Multiple Habitat Conservation Program (MHCP) narrow endemic plant species. As many as 37 sensitive animal species may be impacted as well, including 18 Federal or State-listed species, of which 12 have high potential to occur on site. Nineteen of these species are listed as California Species of Special Concern by the California Department of Fish and Wildlife. Indirect impacts to the region were not estimated but are expected to include introduction of exotic species, noise, light, pollutants, and dust.

The airport footprint also contains land sacred to the Native Americans as well as 19 prehistoric and 2 historic paleontological sensitive geologic formations. The Ricondo & Associates decision document lists the potential to adversely affect architectural resources as moderate. The potential to adversely affect archaeological, paleontological, and Native American resources is high. A mitigation plan will be needed to address these concerns prior to site development.

The proposed access road in Oceanside connecting the highways to the airport faces challenges of its own. First, the road would be located in a floodplain and require protection by a Federal flood protection system. This requires a complete hydrology study to integrate correct design and usage. The building of this road and an improved I-5/SR-76 interchange may also impact the coastal zone and infringe upon resources protected under the city's Local Coastal Program, which stems from the California Coastal Act and the Federal Coastal Zone Management Act. Some of these resources, such as Whelan Lake, the San Luis Rey River, and the multi-use bike trail along the river are protected as well by Section 4(f) of the Department of Transportation Act (Section 303) because of their recreational, wilderness, and/or historic value. Noise contours of 60 and 85 CNEL extend into these public recreational facilities, but these are not considered grounds for closure.

C. Additional/Unique Issues

i. Relocation of Existing Establishments

While the majority of Camp Pendleton is undeveloped, there are areas within the proposed airport footprint which are currently inhabited. The site encompasses 2,853 acres, but some areas adjacent to this region will also need to be acquired. As of 2006 these additional sites bring total land acquisition to 3,214 acres. A breakdown of Figure X below shows that while

most of this land is owned by the military, there are also residential, commercial, industrial, religious, and transportation zones inside the airport footprint as well.

Figure 18: Land Acquisition Summary

	Acres
Total Airport Site Boundary	2853
Land Acquisition by Property Type	
Residential	36
Commercial	10
Industrial	10
Agricultural	
Mining	
Religious Facility	92
Military	2689
Transportation/Other	76
Undeveloped	301
Total Land Acquired	3214

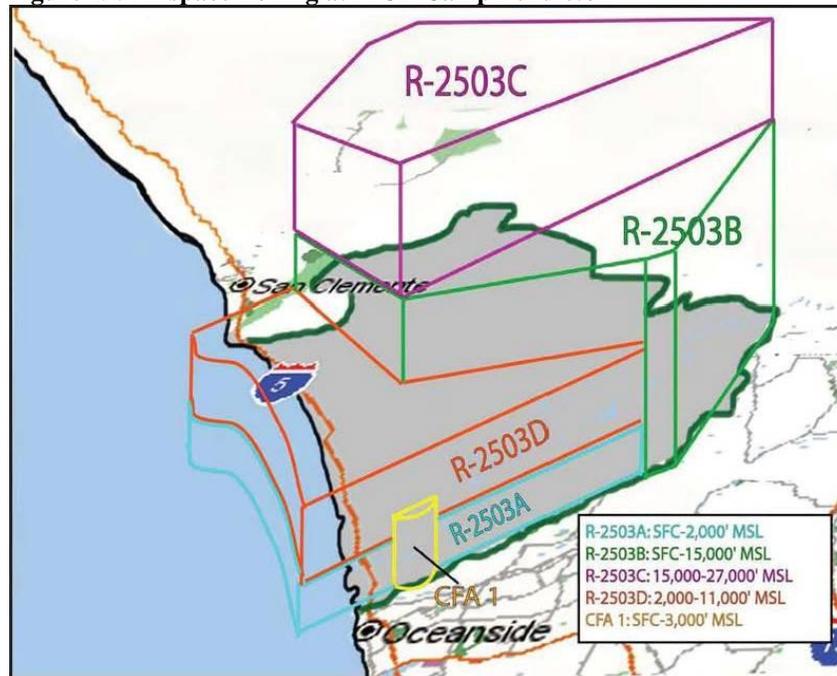
Source: Ricondo and Associates, 2006

Because these findings were recorded in 2006 they will require updating before action is taken. This diagram serves to provide a general picture of how much work acquiring the necessary land will entail. Within the airport footprint a total of 1065 housing units with 10 residential parcels will need to be moved. Of these 858 housing units are occupied by the military and 207 units are within the city of Oceanside. There are also seven private businesses, the San Margarita Elementary School, and the Prince of Peace Abbey Benedictine Monastery will need to be relocated. A portion of the Marine Memorial Golf Course also lies within the site footprint.

ii. Airspace Regulations

For commercial aircraft or any non-military aircraft to fly into the proposed site, an adjustment of the R-2503 Special Use Airspace will be required. To accommodate civilian operations, the surrounding area must be reclassified into either Class B or Class C airspace. The Figure below shows the current airspace restrictions over base in different areas using MSL, or feet above mean sea level.

Figure 19: Airspace Zoning at MCB Camp Pendleton



Source: Marine Corps Base Camp Pendleton Range Operations, 2007

Area R-2503C is solely for use of artillery units during high angle, high altitude firing. It sits in the opposite corner of the potential joint use airport site, which would be near or in the left portion of CFA 1. Presently areas R-2503A and R-2503B are most likely to be affected by public aviation. The operational hours of these sites are 0600-2359. The military may be reluctant to change these operating hours because 90 days of military training are required between 0001-0559, in nearby area R-2503-D. If permitted hours of operation in areas surrounding the airport are not changed, flights leaving the airport would not be able to take off before 0600, or land after 2359. A map of this zoning ordinance is provided in Figure 19 above.

In the proposed plan the Marine Corps would continue to manage air traffic in the R-2503 area, including the existing military airfield. The FAA would manage air traffic in the joint use airfield. According to the Ricondo and Associates Decision Document, the proposed airport plan meets all five of the other aeronautical criteria without any significant obstacles. These criteria are: airfield requirements, airport land requirements, approach capabilities, wind coverage, and expansion potential.

iii. Business Community

The geography of the Camp Pendleton airport may also garner support from outside the county which other proposed locations lack. The North County location would likely be seen as a positive in the business communities of South Orange County and Southwest Riverside County. Because the airport is in their best interest, these regions may help to provide public support and funding for aspects of the project. According to market demand estimates by Eclat Consulting in 2006 for the year 2030, demand at MCB Camp Pendleton is expected to be 1.8% higher than either Miramar or the existing San Diego International Airport, adding an extra 500,000 passengers that year alone (San Diego County Regional Airport Authority, 2006). Because of its proximity to LAX these demand totals include a 12% drop in short-haul flights (primarily to LAX), with the remainder comprised of medium and long-haul flights.

Another potential advantage of the North County site is to extend international operations, potentially creating a gateway to Asia for local trade and travelers. San Diego is a major city along the Pacific Rim, but Lindberg Field currently has only one regular flight to Asia, going to and from Tokyo. The demand for flights between Asia and the Orange and San Diego counties is currently fulfilled by LAX. This limitation may deny these counties international commerce, as well as limit potential opportunities for San Diego businesses to expand internationally. Orange County has an Asian population of 19%, almost twice that of San Diego (United States Census Bureau, 2012). A large number of prominent Asian companies such as Mazda and Kawasaki are also headquartered in this region. The city of Irvine is the halfway point between LAX and the proposed Camp Pendleton site, meaning that an international airport in Oceanside should bring in a noteworthy amount of the air traffic (people and cargo) to and from Asia, especially from Orange County cities located south of Irvine. The Asian population in San Diego County is supposed to grow to 16% by 2050, and sharing a market with Orange County may help bring about better business and travel opportunities for local businesses (Miller, 2013).

The Camp Pendleton airport location will not be more convenient for everyone in the county however. Public support from areas south of Lindberg Field is expected to be low. A new pedestrian walkway (See Figures 3 and 4 on page 36) is currently being built by a private company to link the Tijuana International Airport to a U.S. Customs building in Otay Mesa, leaving just a 525-foot air-conditioned walk in between the two (Dibble, 2013). This will allow San Diegan travelers to keep their vehicles parked in the United States and expedite the long-lines at freeway border crossings, making Tijuana's airport a more viable travel option than in previous years. This project is expected to finish by the end of 2014, after which studies can be done on its impact. If the bridge proves to be a viable resource this may ease public dissent towards an airport in Oceanside from citizens in southeastern San Diego.

Figure 20: Illustration of Proposed Walkway between Tijuana Airport and U.S.



Source: Hernandez, 2010

Figure 21: Map and Aerial View of Cross-Border Bridge



Sources: ESRI; Google; Otay-Tijuana Ventures LLC.

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Source: Hernandez, 2010

iv. Transportation

Traffic and ease of access are major issues for all new airports. Camp Pendleton is currently not built to accommodate high volumes of traffic moving through the area. Oceanside has a strong public transportation network and three major highways accessing the city. This transportation network will need to be expanded upon for an international airport at Camp Pendleton to work efficiently. Oceanside has a rail system running down the coast to San Diego, east to Escondido, and north as far as Orange, Los Angeles, and Ventura County. The cities central transportation center connecting each of these lines sits two miles from the airport site. Another transit center would need to be added at the airport to connect it to this hub. A bus link to the airport would also be needed at the transit center.

According to the Ricondo & Associates 2006 decision document the traffic to and from Camp Pendleton would rise to more than 4.9 million vehicle miles traveled daily (San Diego County Regional Airport Authority, 2006). To accommodate this congestion, additional lanes will need to be added on the SR-78 to relieve traffic flow into and out of Oceanside, Vista, San Marcos, and Escondido. In the years following the Ricondo document a westbound auxiliary lane has been added from the I-15 to Nordahl Road and an eastbound lane has been added from Woodland Parkway to Nordahl. Significant lane expansion would still be needed throughout the rest of the SR-78, however. Three additional lanes are also recommended for the I-5 to ease traffic flow coming up the coast from San Diego to Oceanside. An additional lane in each direction of SR-76 was also suggested between the I-5 and El Camino Real. The traffic light interchange connecting the I-5 and SR-76 would also need to be redesigned to prevent traffic backups at the intersection. Finally, an airport access road would need to be created branching off SR-76 to take passengers to ground access, parking areas, and the terminal. These transportation modifications, while relatively minor in the grand scheme of building an airport,

still will likely require approval by the California Transportation Commission (Caltrans), city, and county planners.

v. Oceanside Municipal Airport

Airspace regulations and safety are a major issue at all airports. The Camp Pendleton site is roughly a mile away from the existing Oceanside Municipal Airport. This airport is not a feasible development site due to space constraints and proximity to local homes and businesses. It is likely that development of an international airport at Camp Pendleton would seriously impact or require the closure of Oceanside Municipal. The city of Oceanside is beginning year six of a 50 year lease with the Airport Property Ventures corporation based in Los Angeles. This company has recently taken over operations at the Oceanside Municipal airport. The City Council approved this action as measure 4-1 in November of 2008. The city expects to receive \$11.3 million in the first 25 years of the contract as yearly rents paid by the private company and 40% of Oceanside Municipal's net income (Tenbroeck, 2008). Enacting a major change to this relationship must be negotiated with Airport Property Ventures of Los Angeles, and it would likely require a buyout. Prior to the signing of this 50 year lease Oceanside Municipal was a hot topic for potential closure. During this time several plans were proposed to close the field and redevelop the land for non-aviation use. The Aircraft Owners and Pilots Association (AOPA) fought to keep the airport open with a public awareness campaign and strong support from pro-airport council members. It is unknown how the AOPA would react to closure of Oceanside Municipal to facilitate an airport project at Camp Pendleton.

The FAA was heavily involved in preventing the Oceanside Municipal airport from closing because the land it occupies was purchased with Federal money specifically budgeted for airport development. In 2006 the Oceanside City Council agreed to stop accepting all Federal Airport Improvement Funds to close the airport in 2027 when their grant obligations expired. The FAA responded to this action by issuing a letter to major Jim Wood and the council stating that "the obligation to keep the airport open as an airport does not expire, since there is no limit on the duration of the obligations with respect to real property acquired with Federal funds." (Armstrong, 2007) The letter went on to explain that "the FAA has only rarely granted a sponsor release from its Federal obligations sufficient to allow closure of an airport, and then only in very unusual circumstances. A request for airport closure from a sponsor requires a demonstration that closure results in a net benefit to aviation." The FAA stance at that time was that Oceanside Municipal Airport was too valuable to close. It is likely that addition of an international airport in Oceanside would supersede Oceanside Municipal in importance.

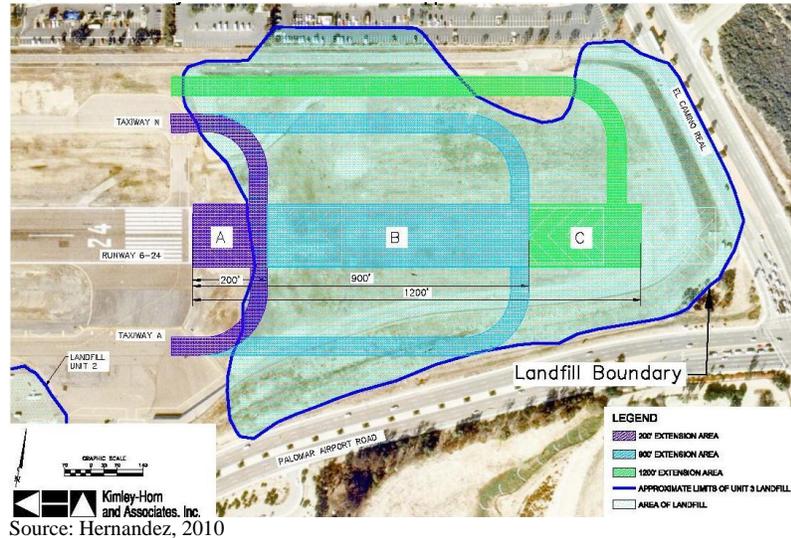
vi. Expansion at McClellan-Palomar Airport

Recent studies exist recommending that the McClellan-Palomar Airport (CRQ) runway be expanded. If this occurs the city of Carlsbad may be less likely to support a new airport in Oceanside if it has already invested substantially in CRQ. CRQ is publically owned by the County of San Diego. It has 285 aircraft based on the field and operates an average of 387 flights per day (AirNav.com, 2013). Of these daily flights roughly 15 (4%) are commercial, with United Express serving as the only major commercial carrier offering flights solely to and from LAX. The runway at McClellan-Palomar— with a length of 4,897 feet— is not currently long enough for major commercial airplanes. It is commonly used by Class B, C, and D aircrafts.

In September 2011, the Palomar Airport Advisory Committee (PAAC) and County Board of Supervisors approved a study to determine if a runway extension would improve airport safety, reduce airport noise, increase operational efficiency, and increase business prospects

(Kaiser, 2013). This study, published by Kimley-Horn and Associates, Inc. in August 2013, looked at increasing the runway length at McClellan-Palomar Airport by either 200, 900, or 1,200 feet (Options A, B, and C in Figure 22). In the report titled "Feasibility Study for Potential Improvements to McClellan-Palomar Airport" the 1,200 foot runway extension was found to be unfeasible due to difficulties with the landfill beneath it. Both the 200-foot and 900-foot extensions were found to meet all the criteria listed above while holding projected cost-benefit ratios of 1.49 and 2.53, respectively (Palomar Airport Advisory Committee, 2013).

Figure 22: Map and Aerial View of McClellan-Palomar Airport



The main benefit of an extended runway at CRQ is to allow airplanes such as the Falcon 2000 or other larger business jets to travel further without having to refuel. With a longer runway aircraft are able to gain more speed before lift-off. This allows them to take off at a heavier weight, allowing for more fuel capacity on the airplane. The map on Figure 22 above illustrates the increased aircraft range for the Falcon 2000 and other larger business jets at the different proposed runway lengths. The probable construction cost of a 900-foot extension with connector taxiways on both the north and south side is \$95.1 million dollars, although \$22.9 million of the \$25.4 million set aside for safety improvements on the west end will be paid for by the FAA. This leaves local taxpayers with a burden of \$72.2 million dollars to complete the project, with projected additional revenues of \$163.2 million over 20 years and an 11-year payback period.

Section IV: FINAL RECOMMENDATIONS

Building a new international airport in San Diego is hard because the city is so over developed that the only remaining places suitable for such an addition are either very remote or owned by the Federal Government. Most of the remote sites considered in the Ricondo document can be ruled out because their locations do not service a large enough demographic to justify the expense of the project. San Diego County has a population of roughly 3 million, while greater Los Angeles County has a population of roughly 13 million. The residents of San Diego only need a new airport if it serves their best interests. Thus, when building a new international airport the project must be positioned to serve the largest demographic possible. For this reason, in addition to the added convenience of pre-existing transportation infrastructure, this study favors the Camp Pendleton site.

A. MCAS Miramar

MCAS Miramar is an excellent location to build an international airport, but the political and financial barriers to development are currently too great to warrant the effort. Developing an international airport at this site mainly benefits the San Diego business community by allowing manufacturers to ship products cheaply and efficiently in the bellies of passenger jets. While San Diego would presumably benefit from this increased revenue, a well-entrenched portion of the populace is currently dependent on military spending for their livelihood, and these people would be disenfranchised by such a development. In future years it is possible that MCAS Miramar will be increasingly targeted by BRAC in an effort to curtail unnecessary military spending. If budget cuts continue to impact MCAS Miramar it is possible the Federal Government may eventually decide to dissolve the base and sell the land. If this happens it will be considerably easier to build an airport there.

B. Campo/Boulevard

Building an airport at Campo/Boulevard is astronomically expensive and the proximity of Los Angeles International Airport renders this site useful to only a portion of San Diego's populace. Obtaining the land for this project would be easy, but the location and demographic this airport proposes to serve makes the site unrealistic. In years to come this entire region will probably be transformed into a green energy harvesting corridor to service San Diego. There are already several green energy companies out there disenfranchising the local residents and building these facilities.

C. Camp Pendleton

Of all the prospective development sites covered in this study, Camp Pendleton is the most attractive. The location of the site minimizes the noise impact on local citizens. Close proximity to major highways and public transit stations allows this site to efficiently service a larger portion of the populace with minimal additions and modifications. The residents of North County are historically more favorable to a new international airport than the rest of San Diego. The business communities of San Diego and Orange County both benefit from this location, implying a higher level of external support. Camp Pendleton operates mostly helicopters, and helicopters share airspace with commercial airlines much better than jet fighters do. The biggest detractor from this plan is the presence of the military, but the sheer size of the Pendleton footprint allows for countless design variations which could minimize this impact.

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