STRATEGIC REPORT FOR
NORTHWEST AIRLINES CORPORATION

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EXECUTIVE SUMMARY

Today, Northwest Airlines Corporation is in the midst of corporate restructuring, protected under Chapter 11 bankruptcy court. The company has made significant adjustments in cost structure and service network, with hopes of maintaining a profitable and sustainable emergence from bankruptcy later this year.

Northwest, along with the airline industry, has experienced a troubled US consumer market while facing ever increasing operational costs. September 11th drove the airline industry into a recession. Security issues, the threat of SARS/Avian bird flu, and an economic recession discouraged business as well as leisure travel. The government proposed two bailout programs. On September 22, 2001, the president signed the Air Transportation Safety and System Stabilization act, compensating airlines for direct loss associated with the September 11th terrorist attacks. Two years later, President Bush signed the Emergency Wartime Supplemental Appropriations Act, compensating airlines for losses incurred by increased security measures and the volatility from the war in Iraq. (S&P) These bailout programs allowed airlines to defer pension plan and benefits payments, encouraging network growth despite industry downturn. In response airlines took on additional debt and pushed cost obligations to the future, where they presumed these costs would be covered by optimistic revenue forecasts.

“As the airlines’ losses mounted and available cash was rapidly depleted, most carriers were forced to shoulder new debt by tapping their credit lines and/or issuing bonds.”

However, optimistic growth forecasts never materialized. Revenue growth and profit margins for legacy carriers were significantly squeezed by the growth of low cost carriers while costs have continued to increase. This harmful trend of
declining profit margins is apparent when looking at comparative graphs of Northwest’s stagnant passenger growth and increasing cost structure.

Unprofitable and unable to fulfill its financial obligations, Northwest airlines filed for protection in Chapter 11 bankruptcy court in September of 2005. With plans to emerge midway through 2007, Northwest is currently implementing widespread cost cuts. Through restructuring, the company will be competitive and efficient, ensuring long term viability and better customer service.

This report aims to solve some of the issues that lie at the root of Northwest’s bankruptcy; to understand where Northwest stands today, and in which direction the airline is headed. Progressive corporate restructuring to meet dynamic industry changes presents a unique opportunities for growth and profit in Northwest’s future.

**COMPANY BACKGROUND**

Northwest Airlines, ticker symbol NWACQ, began in 1926 as an air mail carrier from Twin Cities, Minnesota to
Chicago, Illinois. The airline’s original fleet consisted of only two planes, rented open-cockpit biplanes (see picture on previous page). Founded by Col. Lewis Brittin, Northwest Airlines was a Michigan corporation based out of the Minneapolis/St. Paul International Airport, at that time called Speedway Flying Field. In November 1926, Brittin introduced “the nation’s first closed-cabin commercial plane – the three-passenger Stinson Detroiter”iii. For $40, in July of 1927 Byron Webster became Northwest’s first passenger, taking a 12 ½ hour flight from Twin Cities to Chicago. Expensive and slow, commercial airlines were pretentious thrills rather than convenient or economical. But the reader should realize this was only twenty-six years after the Wright Brother’s 1903 invention of the ‘human flying machine.’ In the company’s first year of business, the airlines carried 106 passengers and the following year, Northwest became an international airline, flying into Winnipeg, Canada.

In 1929, the company was purchased by Richard Lilly of St. Paul. Initially, airline growth was based on the promising profit margins on overnight airmail rather than business passengers. But as American passenger markets and flight capabilities developed, Northwest adapted to service passenger travel. Known particularly for their plane’s ‘Red Tail’, Northwest became one of the nations leading and most recognized airlines. The company pushed commercial aviation frontiers, pioneering new routes and developing novel flight technologies, including the oxygen mask; an invention that made high-altitude routes over the Colorado and Canadian Rockies possible.

In the 1960’s Northwest Airlines was one of the first to connect the United States with Asia, operating the fastest U.S. commercial jet, the Douglas DC8, in a Trans-Pacific route. Making Asian routes a priority, Northwest linked its Minnesota-Chicago base with LA, San Francisco and Seattle, allowing passengers to fly to Honolulu, Tokyo, etc. Trans-Pacific passenger traffic was facilitated by the introduction of the Boeing 747, which Northwest began flying to Japan from Seattle, San Francisco and Los Angeles. Frequently in the 1970’s, Northwest Airlines turned the highest net profit rates in the U.S. airlines industry. The
company’s success was largely due to airline regulation and their dominant presence in the Twin City-Chicago Hubs. With a virtual monopoly on the American Heartland, demand and price inelasticity was guaranteed, and so the airlines flourished. The 1978 Airlines Deregulation Act abolished government regulation on U.S airlines, allowing free entry and exit from domestic routes without government authorization. The following year, Northwest added service to twenty new domestic routes, including Phoenix-Twin Cities, Philadelphia-Orlando, Orlando-Fort Lauderdale, Boston-Fort Lauderdale, etc. While allowing Northwest to expand, deregulation also presented the opportunity for competing airlines to encroach on traditional Northwest routes.

In 1986, Northwest Airlines acquired competitor Republic Airlines, then servicing hubs in Detroit and Memphis and flying “over 100 cities in 34 states, Canada and the Caribbean”iv. By incorporating their main competitor, Northwest Airlines’ stake on domestic commercial service remained intact despite deregulation. The introduction of competition was thought to devastate the ‘legacy’ airlines. Deregulation was expected to drastically drop prices and eventually dissolve the hub-and-spoke style of service. However, Northwest, along with the other large airlines, were able to survive with advantages of economies of scale, passenger loyalty won by frequent flier discount programs, and by muscling out or acquiring smaller competitor airlines. The continual success of the hub-and-spoke structure was attributed to its ability to gather passengers. Channeling customers through hubs ensured high load factors and dedicated brand loyalty.

With the recent trends toward globalization, international markets for passenger transport have experienced rapid growth. This increased consumer demand has been met with modern developments in aircraft capability: faster, more efficient aircrafts equipped with more comforts and state-of-the-art entertainment systems. Large airlines make high returns on flying American businessmen and travel passengers to Europe, Asia, and more recently the Middle East and Latin America. Without the high costs of takeoff and landing, yield margins on
international flights are large, often the highest in the airlines industry. In 1991, Northwest joined KLM Royal Dutch Airlines to connect the Minneapolis/St. Paul and Amsterdam, correlating seating, ticket pricing and service timing. At the time, the alliance nearly doubled Northwest Airlines share of transatlantic flights, to about 12 percent. The airline has always interest in servicing promising US-Asian routes, and in recent years has greatly extended its presence in Japan and China. Northwest has a strong hub at the Narita International Airport, providing a window into the rest of Asian airways. The company has also increased its presence in the Trans-Pacific air cargo market, recently acquiring rights to service US-China airmail routes.

Largely due to air-security concerns and the systemic US recession following September 11th, the airlines industry has been in a decline. Encroachment of thrift airlines, like Southwest and Jet Blue, into legacy air-markets has further eroded profit margins, industry-wide. Discount carriers have effectively driven down industry pricing, aided by online price searching tools. While legacy airliners have lost passenger revenue, costs have dramatically increased. Pension obligations are becoming more burdensome as US population is growing older and living longer. Even more costly, jet fuel prices have more than doubled in the past four years. Recently, Northwest Airlines declared Chapter 11 bankruptcy, protection that allows the airlines to cut workers’ jobs and wages, without repercussions from labor unions. Under bankruptcy court, the airlines is restructuring, reducing their fleet size and service network.

The future of Northwest, and the US airline industry, is uncertain. With recent cost savings, Northwest turned the first quarterly profit in 5 years, posting a pre-tax earnings of $301 million. Poised to emerge from bankruptcy court later this year, Northwest airlines should be well positioned for future growth and sustainability.
COMPETITIVE ANALYSIS

MARKET DEFINITION

Defined by the North American Industrial Classification System (NAICS), Northwest Airlines Corporation is classified as a Category 4811 “Scheduled Air Transportation”. Within this category, Northwest performs services that fit into two subcategories, Category 481112 “Scheduled Air Passenger Transportation” and Category 481111 “Scheduled Air Freight Transportation”. The two services, though distinct on the demand side, share many similarities and a high cross-elasticity of supply. High priority cargo must be delivered within 24 hours, airport to airport, so air cargo and air passengers share similar time constraints. Both services require the same inputs, including labor and equipment, and for obvious reasons overlap geographies.

Functioning as the traditional hub-and-spoke legacy carrier, Northwest bases operations out of the American Heartland, specifically Minneapolis/St. Paul, Detroit and Memphis. Northwest serves over 900 cities in over 160 different countries around the world. Through its affiliation with SkyTeam Global Alliance, Northwest passengers can connect to over 600 destinations with 14,000 daily flights.

INTERNAL RIVALRY

In air traffic, both cargo and passenger, the US domestic market is highly competitive. Based on market cap size, Northwest Airlines’ main competitors are American Airlines, United, Delta Air, US Airways and Continental Airlines. With the hub-and-spoke skeleton of deregulation, most airline market strategy is based on the concept of passenger channeling. Their objective is to expand spoke
routes and traffic passengers through hubs to destinations. This strategy has led to overexpansion and intense competition. Each airline occupies unique hub airports, where they enplane an overwhelming majority of passengers, and fiercely compete for spoke service. Passengers traditionally were won or lost by frequent flier programs, flight services and brand name. Due to systemic changes in the US airline industry, these distinctions are beginning to disappear. Airlines are now competing through direct price warfare, dropping revenues industry wide and forcing many airlines, including Northwest, to restructure through Chapter 11 bankruptcy. In recent years, airline products have become more or less identical, so profit margins are now determined by cost structures, not service premiums.

Discount carriers, like Southwest, Jet Blue, AirTran and Frontier, have exhibited record growth in the US domestic markets. The graph to the right shows the increasing presence of these low cost carriers in the past year. In 2005, it was reported low cost carriers transport 30% of domestic passengers, compared with only 10% in 1995. Today, it is estimated discount carriers influence over 75% of industry pricing, severely eroding profit margins of legacy carriers. From 2000 to 2004, low cost carriers increased their available seats by 24%, from 182 million to 226 million, and increased annual passengers 27%, from 124 million to 158 million. Low cost carriers can undercut traditional airlines because they have a younger, non-unionize labor force, they offer simple service and they fly to secondary airports. Since their service networks are constrained by low costs, discount carriers often cannot compete in legacy service
routes. However, the have been extremely significant competitors in fringe markets and have hurt profit margins across the board.

**ENTRY AND EXIT**

The 1978 deregulation of the domestic airlines industry has torn down barriers to entry in the US airline industry. However, natural barriers still exist. For one, airlines require immense amounts of capital. The Boeing website, [www.boeing.com](http://www.boeing.com), offers price quotes for aircraft (seen in the graph to the left). Besides expensive aircraft, there are large costs associated with labor, fuel, maintenance, airport fees and marketing. If an airline does not have cash in reserve, slight changes in highly volatile fuel costs can send it under.

Developments in the low cost regional jet have made start up jet airlines possible. A 50-100 seat regional jet can be purchased for under $20 million and with load factors well below industry load factors, entry in regional jet airlines is less difficult than national airline markets.

Opportune times for airline start ups are in industry depressions. With airlines going into bankruptcy, second-hand aircrafts are in high supply and cheap. Also, airlines are looking to consolidate service networks, providing opportunity for new carriers. New airlines are at a cost advantage, with low relative labor and maintenance expenses. Their balance sheets do not carry the heavy load of pension and benefit programs that often burden established airlines.
Post entry competition for new airlines can be difficult, commonly subject to economic bullying from established airlines. When a new airline enters a legacy hub, the legacy carrier may cut rates, forcing the new entrant out of the market or into bankruptcy. Legacy airlines networks are geographically diverse and have deeper pockets, allowing them to sit on a temporary loss if it means eliminating a new entrant. The US Department of Transportation under statute 49 U. S. C. 41712 has the authority to stop unfair exclusionary behavior. Under the DOT’s definition this would be defined as added capacity or fare discounts great enough to drop prices below reasonable regional rates.

Airline exit requires liquidation of fleet, equipment and selling rights to terminal space, airport facilities and airspace. The airline has obligations to employees to pay post retirement pension and benefits plans and often has long term obligations to corporate bond holders, since much of airline financing is through debt. In addition, the Air Safety Transportation Act required all airlines to honor reservations, establishing roll off servicing or a transfer of passengers to other airlines. Proper liquidation is a lengthy process.

**SUBSTITUTES AND COMPLIMENTS**

Air travel has further distinguished itself from other forms of passenger transportation over the last couple decades. Possible substitutes for airlines are cars, buses and public transportation systems, like trains. Interstate highways are universally accessible, but time and now fuel consumption are costly. For long haul and even regional travel, buses and cars no longer seem to be reasonable substitutes for scheduled air travel. Below is a breakdown of costs and time for automobile, buses and airlines.

Driving from Ontario, CA to San Francisco would take 6 hours and 21 minutes according to mapquest.com. The total distance is 416 miles, which makes total
gas cost around $67, assuming gas is $3.20 a gallon and the car averages 20 miles per gallon. A plane ticket can be purchased through Southwest.com for $44, with flight duration of 1 hour 15 minutes. A Greyhound bus ticket would cost the same as the airline fare, $44, but the bus would take 9 hours and 20 minutes.

It takes an individual 4 days of driving, or 43 straight hours, to cross the country, covering a total of 2,909 miles from New York to San Francisco. The estimated fuel cost is $465, again assuming $3.2 a gallon and a car that operates 20 miles per gallon. From Oakland to LaGuardia, the airfare offered by Southwest is $139 one way, and an estimated travel time of 8 hours, less on the return flight. Greyhound offers a bus service for $183. The bus takes 3 days, 1hr and 15 minutes, including 3 transfers.

For national as well as regional there is no substitute for air travel considering comfort, cost or time. However, there are obscure substitutes for air travel. Conference calls, Webcams and advancing communication technologies may reduce the need for face-to-face business contact and travel. Also, though public transportation is not a direct substitute for air travels it provides opportunity for substitutes within the airline industry. With the development of the Bart in San Francisco, flying into San Francisco airport may not be all that much different than flying into Oakland and quickly taking Air Bart into the city for under $5. Developed public transportation improves secondary airport services, providing substitutability between Southwest’s service to Oakland and United’s or Delta’s service to San Francisco International.

Compliments to airlines come in a variety of forms. Traditional compliments are hotel and rental car services and prices. In broader scope, economic development encourages businessmen and tourism investment encourages vacationing passengers, so industry growth would be a compliment to business travel or tourism investment would be a compliment to vacation trafficking. The range of compliments and the ambiguity of their effect are broad.
Supplier Power

Fuel, labor and aircraft suppliers maintain significant power in the airlines industry. With few aircraft manufactures and fuel suppliers, the airline industry is subject to strong supply side pricing. Labor unions have monopolized on labor supply in most airline’s workforce, proving formidable wage and contract negotiators. Below is an outline of each.

Fuel
The realized cost of higher jet fuel prices is substantial for Northwest. In the past, the company has had little hedging and so was fully exposed to recent jet fuel volatility and increases. However, in an industry where consumer power is great, Northwest can’t pass these costs off to the consumer. While other airlines, most notably Southwest, have been protected with carefully placed hedges, Northwest took fuel hikes on the nose. In the last 7 years, fuel costs rose +118.7%. Below shows the tremendous volatility in jet fuel prices over the past 7 years.

**US Jet Fuel Prices**

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Jet Fuel (cents per gallon)</th>
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<tbody>
<tr>
<td>2000</td>
<td>90</td>
</tr>
<tr>
<td>2001</td>
<td>75</td>
</tr>
<tr>
<td>2002</td>
<td>70.8</td>
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<tr>
<td>2003</td>
<td>88.2</td>
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<tr>
<td>2004</td>
<td>120.8</td>
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<tr>
<td>2005</td>
<td>172.2</td>
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<tr>
<td>2006</td>
<td>196.8</td>
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<tr>
<td><strong>2006 vs. 2000</strong></td>
<td><strong>+118.7%</strong></td>
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In 2007, as described in the SWOT Analysis, Northwest began hedging but these protections will run out at the end of the year, leaving the company exposed to jet fuel price risk once again.

Another method outside of hedging which may reduce jet fuel price risk is purchase pooling. To take advantage of volume discounts and to pool risk, airlines have begun looking at coordinated fuel buying programs. The idea was suggested by Idris Jala, president of Malaysian Airline System,

“If you pool together, you get volume discounts. If three airlines get together, it could work, imagine 10 airlines getting together.”

An additional built-in-hedge to these programs would be diversification of regional risk. If small supply or distribution machinery breaks down in a region, oil prices spike locally, but, more often than not, global prices remain unchanged. Contracts would be entered in on international fuel markets, eliminating regional risk in fuel pricing. The proposal may violate anti-trust laws and the IATA may put a stop to the idea. But if pooled purchases do come to fruition, supply power will be reduced and fuel costs should drop.

**Aircraft Manufacturers: Boeing and Airbus**
The two main producers of aircrafts are Boeing and Airbus. The 1997 McDonnell Douglas merger with Boeing created a virtual duopoly in the market. Currently, Northwest operates three models from Airbus, the A319, the A320, the A330-200 and the A330-300. Northwest operates a total of 163 Airbus ships and has another 15 on order, mainly 8 A330-300s. Northwest also operates McDonnell Douglas DC9s and DC10-30s, but is in the process of retiring these ships. In addition, Northwest flies Boeing’s 757-200, their 757-300, their 747-200 and their 747-400. Northwest currently operates a total of 85 Boeing vessels and has 18 new 787-8s in order. Aircraft contracts are long, expensive deals. To space aircraft age in a fleet and because aircraft production is so capital and labor intensive, delivery of contracts is staggered and plays out often over many years.
Besides upfront costs of the planes, contracts offer great rewards to suppliers in *de facto* return business concerning maintenance, part replacements and reorders. Aircraft diversity is dangerous for airlines. If there is a need to switch planes at the terminal due to equipment malfunction or maintenance, finding a proper replacement in a diverse fleet can be problematic. If Northwest replaces an Airbus A330-300 with a Boeing 757-300, the plane will have 74 less seats, forcing the airline to bump passengers. When an airline is coordinating hundreds of flights a day to/from cities all over the world, this replacement cost is magnified. Also, when crews switch aircraft, either through promotion or relocation, airlines spend a lot of money and time training pilots and flight attendants. A standardized fleet does not incur this cost. When airlines lock in fleet contracts it represents a pledge of repeat business to standardize their fleet, preventing this coordination cost.

**Labor**

Labor unions hold strong supplier power in the airline industry. Northwest’s labor force is highly unionized, its workers belong to one of the following groups: Air Line Pilots Association (ALPA), the Aircraft Mechanics Fraternal Association (AMFA), the Aircraft Technical support Association (ATSA), the International Association of Machinists and Aerospace Workers (IAM), the Northwest Airlines Meteorologists Association (NAMA) or the Transport Workers Union of America (TWU).

These unions are tough negotiators concerning contracts, wages and benefits plan. Strikes in service industries are crippling and credible threats are quite effective in labor negotiations. “Scope” clauses prevent airlines from contracting jobs out to third party pilots. Recently, Northwest has circumvented these obstacles by going under bankruptcy protection. As a result, the airline has been able to hire regional jet pilots, previously prohibited in Northwest pilot contracts and has made substantial pay cuts to employee salaries and benefit programs. In bankruptcy, the airline is protected against supplier power, but must still make
concessions since passenger traffic is a service industry and as in any business, the employees are the heart of Northwest.

**BUYER POWER**

The internet has single handedly empowered the consumer in commercial airlines. Websites like Orbitz.com, Expedia.com, Travelocity.com and CheapTickets.com compare airfares and sort by pricing. Increased service options, presented by the rise of low cost carriers, have also added to buyer power. Even business travelers, notorious for paying high-premium, time-sensitive fares, are becoming price sensitive. As a result, prices have dropped and profit yields have converted into consumer surplus.

**SWOT ANALYSIS**

By 2006 revenue passenger miles (RPMs) statistics, reported by the IATA, Northwest Airlines Corporation is the world’s sixth largest airline. Their industry position has dropped from 2005 measures, where a survey by International Air Transport Association ranked NWA as the world’s fourth largest airline, as measured by passenger kilometers flown. Within the 2005-2006 fiscal year, Continental Airlines Inc. and British Airways surpassed Northwest. The main reason for Northwest’s market-share decline is attributed to the restructuring of the airline’s fleet and routes.

Under the sanctuary of Chapter 11 bankruptcy, Northwest has restructured, streamlining operations with optimistic goals of exiting bankruptcy court midway through 2007. The company has realized over $2.4 billion in annual labor and non-labor costs, $4.2 billion in debt reduction and has made large strides in streamlining their fleet and optimizing their service network.
The airline has advantageous positioning in the domestic markets, operating hubs in Minneapolis/St. Paul, Detroit and Memphis. In international markets, Northwest is well positioned for global growth in the air passenger and freight service sectors, most notably their first mover advantage in Asian markets as well as their strong partnerships with European airlines.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>• Strong domestic positioning 2007</td>
<td>• Poor domestic growth and unprofitable operations</td>
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<tr>
<td>• First mover advantage in Pacific markets</td>
<td>• Aging fleet</td>
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<tr>
<td>• Strong international partnerships</td>
<td>• Declining profit margins in the trans-Pacific routes</td>
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<td>• Strong affiliations with regional jet airlines</td>
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<table>
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<tr>
<th>Opportunity</th>
<th>Threats</th>
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<tr>
<td>• Major developments in cost cutting airline technologies</td>
<td>• Disgruntled labor force</td>
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<tr>
<td>• Optimism in the Chapter 11 restructure plan</td>
<td>• Increased competition from low cost carriers</td>
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<tr>
<td>• International growth in tourism/travel</td>
<td>• Increasing fuel costs</td>
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<td></td>
<td>• High insurance premiums</td>
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**STRENGTHS**

**Strong domestic positioning 2007**
Since inception in 1926, Northwest has been the primary server in the American Heartland. The airlines formed around the Minneapolis/St. Paul hub and expanded with the 1986 acquisition of Republic Airlines to also service hubs in Detroit and Memphis. Based on statistics by the ACI, Airports Council International, Detroit, MI ranked 19th and Minneapolis/St. Paul, MN ranked 20th in Total Passenger Traffic for world airports. The airports each moved roughly 36 million passengers through 2005-2006 and ranked 10th and 11th respectively in size comparative to domestic markets. According to the same report, Memphis, TN was the world’s busiest cargo port, trafficking 3.962 million tons of cargo annually.
In each hub, Northwest controls a majority share of enplaned originating passenger. In Minneapolis/St. Paul (MSP) during the first two quarters of 2006, Northwest enplaned 61% of originating passengers, while the next largest competitor, United Airlines, enplaned only 13%. During the same period in Detroit (DTW), Northwest enplaned 56% of all originating passengers, while the next largest competitor enplaned only 13% of originating passengers. In Memphis, Northwest enplaned over 60% of all originating passengers, while the next largest airline enplaned only 12%. Their strong presence the US airlines industry helps builds brand recognition and airline allegiance. The airline’s geographic positioning and large passenger load provide the underlying infrastructure necessary to support both international trafficking as well as partnerships with regional jet affiliates.

**First Mover Advantage in Pacific Markets**
Northwest Airlines first engaged in Trans-Pacific flights in 1947. Today the airline is a major player in US-Asian aviation, maintaining one of the world’s largest Pacific route networks. Northwest is the largest non-Japanese carrier out of its Asian hub at Narita International Airport in Tokyo. The airline has been award the “fifth freedom”, allowing the airline to transport any passenger, even Japanese originating, through Narita International. Unlike the “open skies” services in Europe and the United States, routes to and within Asia are often regulated by respective governments. Northwest’s tested track record and long standing relationships with national aviation agencies in many Asian governments has boded well for the corporation, allowing the airlines to secure several large service contracts in the last decade. Northwest has the capability and political right to fly through to 12 Asian destinations, including Bangkok, Beijing, Busan, Guam, Guangzhou, Hong Kong, Manila, Nagoya, Saipan, Seoul, Shanghai and Singapore.

In September 2004, the Department of Transportation assigned six additional US-China cargo routes to Northwest. In February 2005, three additional cargo routes were awarded and then in August 2006, four more US-China cargo routes
were awarded. Traditionally, Northwest used Hong Kong as a cargo hub, but seeing margins diminish from increased competition, the airlines rerouted their services through the Baiyun Airport in Guangzhou. With the recent buildup of regional airlines in China, Northwest will have the ability to reach the necessary Chinese and East Asian markets while establishing itself as one of the major international airline at the Guanzhou International Airport. The ability to be a major player at the Guanzhou International Airport will most likely be more advantageous to Northwest than being one of many in Hong Kong, especially in light of the strengthening Chinese domestic airline market. In 2004, the Guanzhou Airport built a second runway in 2004 and is in the process of building a second terminal and third runway, targeted for completion in 2008. Outstanding growth of regional airports and direct shipments is expected in China and Northwest is in a unique position to benefit.

**Strong International Partnerships**

In 1992, the Netherlands and the US signed an “open-skies” aviation treaty, providing Northwest a window in the European markets, the Amsterdam Schiphol Airport. Partnered with KLM Royal Dutch Airlines, the Northwest network extends to all of Europe, several major Middle Eastern Cities as well as 13 African countries. Immune to antitrust law, the partnership coordinates scheduling, code-sharing, frequent flier programs, luggage transfer and provides joint airport lounge services. Schedule coordination, reducing notoriously long international layovers, and baggage check-through add tremendous value to passenger comfort. Beginning this year, KLM will be able to sell tickets for Northwest, and visa verse. This coordinated marketing scheme provides exposure for Northwest into European markets while saving the airlines otherwise costly marketing.

Further extending Northwest’s European network, KLM was acquired by Air France in 2003. This partnership will put Northwest at the forefront of US airlines in Europe, an important relationship in the wake of 2005 concessions towards the US-European “open skies” policy. The value is apparent in slot-
allocation at Heathrow airport - only Continental, Delta, Northwest and US Airways were awarded “new entrant” access. Even in a deregulated playing field, limitations on runway space and terminal access will constrict networks to ‘grandfathered’ access rights. Northwest is well positioned for this next generation of airline market structure.

**Extensive Additional Partnerships**

In 1998, Northwest and Continental Airlines announced a code sharing agreement, later joined by Delta in 2002. This partnership, contracted until 2012, will give Northwest further access to domestic markets, specifically the South, East and Mountain regions. Northwest now has access to Delta’s extensive network in South/Central America, its large presence in the Northeast Corridor, out of JFK International, and its South Eastern hub in Atlanta, recently ranked as the busiest airport in the world. In 2003, Delta and Northwest airlines expanded their code sharing to 650 daily domestic flights, the greatest permitted under the DOT.

On the international playing field, Northwest has worked hard to form alliances. The airline has frequent flier co-programs with Cebu Pacific Airlines, Garuda Indonesia Airlines, Malaysia Airlines, Japan Airlines, Jet Airways of India, Air Europa, Kenya Airways, Malev Hungarian Airlines and others. As of September 2004, Northwest is an integrated part of Skyteam alliance, a direct competitor of Staralliance and Oneworld. The coalition currently has 10 member airlines, with six pending additional airlines – China Southern Airlines, Air Europa, Copa Airlines, Kenya Airways, Middle East Airlines and Tarom. This coalition strengthens pre-existing agreements Northwest is involved with, especially code-sharing agreements with pending members whose entry into Skyteam alliance would be fruition of Northwest sponsorship. Integrated frequent flier miles, reciprocal airport lounges, unified check-in standards, one network reservation service, and coordinated scheduling are just some of the advantages the alliance provides. With total RPMs for US originating international flights increasing
5.7% from 2005-2006, the convenience offered by Skyteam alliance will be attractive to potential Northwest passengers xv.

**Affiliates in Regional Jet Air-service**

Since the development of a low cost jet plane, regional jet airlines have mushroomed. These jets can fly routes up to 1,300 miles, cost less than $20 million a craft and have the capability to seat up to 100 business passengers. Their average load factor, industry estimates around 50%, is significantly less than the load factor of larger jets used by legacy and discount airlines, typically ranging between 65% and 85% xvi. These statistics are slightly misleading because the per seat cost of smaller jets is higher, since these aircraft needs the same expensive landing/takeoff equipment, the same number of pilots (two), and the same expensive avionics, but have less passengers to carry the costs. However, regional jet airfare has built in price premiums and little competition to bring down costs, and consequently allow load factors to be lower than the traditional 737s. With many legacy carriers consolidating hub-and-spoke networks, combined with increasing cost-reducing technology development in regional jets, these markets are prime for growth. Northwest, affiliated with Pinnacle Airlines, Mesaba and Compass, is in good position to take advantage of such developing markets.

Pinnacle operates 124 Bombardiers CRJ200s, and has shown encouraging growth statistics, reporting 12.4% increase in passenger carry in March 2007 compared to a year ago and a 8.5% increase in revenue passenger miles xvii. Mesaba operates 36 76-seat CRJ900s and 49 Saab 340Bs. Both Pinnacle and Mesaba underwent Chapter 11 restructuring with Northwest, reducing aircraft and engine leases, vendor costs and labor costs. With labor rights restricted, Northwest was able to get around Pilot “scope” clauses that normally restrict legacy airline affiliation with regional jet airlines.

For a regional jet airline, affiliation with Northwest is highly attractive. The smaller, usually unknown airline carries the Northwest symbol, has access to
Northwest passenger flow and their reservation network. These regional jets will ‘feed’ Northwest hubs, like the connector to Minneapolis/St. Paul from Dulles International in Washington, DC. “[The] Federal Aviation Administration predicts that the US regional aircraft fleet (both jets and turboprops) will reach 3,851 by 2017, up from 2,862 as of December 31, 2005”xviii. In 2006 Northwest earned 1.399 billion in regional passenger revenue, up 4.7% from 2005 and up 103% from 2002(Nothwest 10K). The industry as a whole is seeing similar numbers, up 189.1% in November 2006 from a year before in November 2005xix. Northwest should come out of Chapter 11 with a strong presence in regional airlines, providing needed stream of revenue and passenger traffic.

Weaknesses

Poor Domestic Growth and Unprofitable Operations
Northwest airlines has turned a net loss income four of the last five years, reporting a net loss of $4862 million in 2004, $2,533 million in 2005 and $2,835 million in 2006. The company has posted negative operating margins from 2002 to 2006, losing -8.5% and -7.5% respectively. A significant factor to Northwest’s unprofitable operations has been poor passenger carry growth in the US domestic market. The Department of Transportation reported declining growth rates in the last four years, including negative growth rates last year. The US domestic market is unable to finance the currently over-saturated airline industry, evidenced by recent bankruptcies of legacy airlines. Side-by-side, the correlated decline is apparent.
### Year Domestic Revenue Passenger Enplanements (millions) % Change Year Revenue Passenger Miles (millions) % Change from Previous Year

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</thead>
<tbody>
<tr>
<td>Industry</td>
<td></td>
<td>Northwest</td>
<td></td>
<td></td>
<td>Northwest</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>548,629</td>
<td>10.1%</td>
<td>2004</td>
<td>72,032</td>
<td>78,130</td>
<td>8%</td>
</tr>
<tr>
<td>2005</td>
<td>573,661</td>
<td>4.5%</td>
<td>2005</td>
<td>81,814</td>
<td>81,814</td>
<td>4.7%</td>
</tr>
<tr>
<td>2006</td>
<td>577,615</td>
<td>.6%</td>
<td>2006</td>
<td>78,044</td>
<td>78,044</td>
<td>-4.61%</td>
</tr>
<tr>
<td>2007</td>
<td>N/A</td>
<td>N/A</td>
<td>2007</td>
<td>N/A</td>
<td>N/A</td>
<td>N/Axx</td>
</tr>
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### Aging Fleet

In a 2006 analyst report, John E. Luth, president of Seabury Group LLC, an airline investment bank and consultancy, said “at an average age of 18 years, Northwest’s fleet is more than twice as old as the industry average of eight years and older than the fleets of all of its legacy and low-cost carrier competitors.” Luth estimates Northwest will need to spend upwards of $11 billion over 10 years to update its fleet to the standard of competitors - “adjusted for size that is roughly three times the rate of capital expenditures planned by United Airlines during the same time period.”

Excluding DC9s and DC10-30s, which average 35.1 and 29.0 years respectively, the average age of aircraft is 10.3 years, which puts Northwest’s fleet age competitive with that of competitors. In 2006, Delta’s average fleet age was 13.1 years, Southwest’s was 9.4, United was 11.7 and American was 13.3 years. However, simply retiring older ships does not solve Northwest’s problems with an older fleet.

As of December 31, 2006, Northwest had order confirmation on 5 A319s, 2 A320s, 8 A330-330s, and 18 Boeing 787-8s, as well as 36 regional CRJ900 jets and 36 Embraer 175 jets. Though necessary, purchasing new aircrafts is difficult for a company that turned a net loss of ($2.8) billion in 2006. Not only is the company currently stretched for funds, but additional financing is expensive for a firm which just eliminated unsecured debt and does not have a times-interest-earned statistic. However, with fleet restructuring, Northwest will be securing a
substantial 'built-in' fuel hedge by purchasing more fuel efficient vessels. This savings in fuel burn should be influential in wake of continually rising fuel prices.

**Declining Profit Margins in the Trans-Pacific**

Though Northwest enjoys a long and unique position in Asia, the trans-Pacific air service is expected to see diminishing per unit yield margins as competition enters a liberalizing Asian air markets. Beginning on March 25, United will be servicing daily routes between Dulles International Airport and Beijing. Expecting Asian air travel to increase with Japan Airlines entrance into Oneworld Global Alliance, American Airlines is revamping its Asian hub at Narita International Airport, Tokyo. Terminal refurbishments and the alliance with Japan Airlines, are expected to increase American Airlines partner passenger traffic by 20-30% out of Narita. Though Asian/Pacific passenger traffic is forecasted to increase 5.9% in 2007 from 2006 carry levels, international competition will likely drive down margins, possibly eroding Northwest’s net profits\textsuperscript{xxii}. The same International Air Transportation Association report estimates 2007 net profits in the Asia-Pacific will decrease by 29%.

IATA forecasts a 6.2% increase in international cargo shipping to and from Asia/Pacific, but for Northwest, these growth rates will be met with significant declines in price premiums. Renovations at the Guangzhou airport are to include a warehouse and cargo runway exclusively for FedEx usage.

If the Chinese government is slow to liberalize air services, Northwest may be able to hold on to high profit margins it currently enjoys as a first mover. Despite the 2004 Washington-Beijing agreement to increase services between China and the US, only 10 routes operate a US-China daily passenger service. The Chinese government appears to be reluctant to deregulate the skies, hoping to protect a fast growing infantile domestic market. Already servicing US-China routes and well positioned in Tokyo, Northwest would like to see this protectionism continue.
**Opportunities**

**Major Developments in Cost Cutting Technologies**

(i) **Internet and Online Ticketing**

Starting in 1995 under the leadership of Alaskan Airlines, the internet has become a major cost cutting tool, reducing marketing expenses and more importantly reducing costs associated with ticket bookings. A commercial Website, www.nwa.com, is accessible 24 hours a day and dramatically cuts down on customer service needed to assist passengers.

“Southwest Airlines reported in 2002 that its Internet bookings cost about one dollar to make, while its costs to book with a travel agent was between $6 and $8. Tickets booked through Southwest’s own agents cost several dollars”"xxiii.

More recently, the invention of an E-ticket has dramatically decreased ticket booking costs, virtually eliminating the value added by travel agents on domestic and easy, one stop international flights. Reflecting this change, all major US airlines cut commissions paid to travel agents. Though travel agents still have a market in ‘travel packaging’, they are obsolete in simple travel, where internet convenience makes ticket booking easy and efficient enough to allow each passenger to be his own agent.

E-ticketing eliminates some book keeping for airline accountants as well as saves labor and time, costing an industry average of just 50 cents per ticket. (S&P) Passengers who print their tickets at home or office computers pay for paper costs, a small but welcomed savings. The Standard & Poor industry review estimates e-tickets account for about 95% of all tickets sold in 2005.

As of September 2005, some 83% of Northwest customers check in through online booking. (10K) The airline was the first to offer E-ticketing in Europe and
Asia, and today continues to drive self-service ticketing to new markets. Northwest has Kiosks at more locations than any of its rivals, employing more than 1,100 self-service check-in kiosks in over 230 airports internationally. (NWA.com)

From a service perspective, E-tickets have cut down on check in lines, making the traveling process more comfortable. Check-in-times are often less than 60 seconds, a welcomed time-saving considering the hassle of stricter airport security.

E-ticket Kiosks, Northwest’s self-service check-in stations, are used throughout North American, Europe and recently have been installed throughout Asia airports. Though Asian markets have been slow to adopt online check-in, Northwest has led the way, offering interactive Kiosk software in four different Asian languages. Appealing to international passengers, who have easy access to a computer but not a printer, Northwest offers a boarding pass faxing service, giving customers broader access to online ticketing. In addition, Northwest’s Kiosks also have the ability to read passports, a universal form of identification which appeals to international travel. As Northwest continues to integrate itself in global partnerships, online ticketing will facilitate new servicing within otherwise distant consumer markets.

(ii) Air Traffic Equipment Advances
Recent advancements in aviation software have helped abate expensive “overfly” costs as well as optimize flight time as a function of fuel costs. “Overfly” costs are fees charged by countries for access to commercial airways. These charges can be quite complicated and difficult to calculate when considering an optimal route. Fuel costs reached record highs in 2005-2006, making optimizing avionics valuable tools.

![High Costs](image)

*Note: New York Harbor contract for delivery within one month
*Source: Reuters*
Deutsche Lufthansa AG, Electronic Data Systems Corp., Boeing Co.’s Jeppesen, Sabre Holdings Corp., and SITA are the leaders in this new age of aviation technology. Taking into account a multitude of variables, including airplane weight, fuel burn, weather, and country specific airline fees and air traffic control charges, among others, the software has tremendous power to save airlines money. In a March 2007 article, the New York Times analyzed a sample flight, in which the new route-planning software saved United Airlines $790 in fuel, $884 in “overfly” charges and 79 miles in distance covered from their San Francisco-Frankfurt route. Northwest uses a Jeppesen product, optimistic about future developments in this field. Teamed up with United Airlines and Air Canada, Northwest has partnered with Unisys to develop similar system to more efficiently operate its air cargo service. Such strides should prove constructive as Northwest expands its cargo service, further integrating with Air-France Cargo and KLM Cargo in Europe and regional air cargo services in Asia.

**Optimism in Restructure Plan**

With plans to emerge from Chapter 11 later this year, Northwest has made considerable advancements in cost cutting and streamlining. Northwest has consolidated its fleet and service network, reducing system-wide capacity by 10% in 2006. The corporation has begun retiring older planes and discontinuing service for unprofitable routes. In 2006, Northwest was offering 15% fewer flights than in July 2005, and the airlines had abandoned six domestic airports, including Reno, El Paso, Aspen Co., Ontario CA., Gainesville Fla., and Rockford Ill., and two international airports, Rome and Bermuda. More cutbacks to improve route efficiencies took place in the fourth quarter of 2006, consolidating available seat miles by 7.5%, and more are expect in 2007.

In a 2006 annual reports, Northwest Airlines reported a 10.8 percent improvement in year-over-year cost per available seat mile (CASM), excluding fuel and unusual items. The cost cutting came from $1.4 billion in annual
labor reductions, $400 million in annual fleet ownership expenses, and $150 million in annual reductions on interest expenses of unsecured debt.

Northwest Airlines Corporation has eliminated $4.2 billion in unsecured debt and lease obligations, strengthening their balance sheet. As a result, Northwest reported $301 million in pre-tax earnings in 2006, before reorganization items, compared to a 2005 pre-tax loss of $1.38 billion. For the first time since 2000, Northwest reported positive pre-tax earnings. However, these numbers are not as optimistic as they might seem. Including reorganization items Northwest reported a net loss of $2.8 billion in 2006 compared to the $2.56 billion net loss for 2005. The company has a long way to go before becoming a viable service, but steps are being made.

**International Growth in Tourism/Travel**
The World Travel & Tourism Council (WTTC)\textsuperscript{xxvi} predicts growth in global travel over the next ten years to increase by 4.6% annual, accounting for roughly $6.5 trillion of business. With established international partnerships, Northwest should be in a prime position to service this increasing travel. Northwest operates a travel agency, called Worry-Free Vacations under MLT Vacations Inc. Even though the travel agent is obsolete in normal passenger markets, MLT adds value by bundling vacation packages, coordinating air travel, car rental, hotels, and additional services with tourist activities. MLT Vacations book all airfare through Northwest and will continue to supply travel customers to the airline as world tourism experiences robust growth.

**Threats**

**Disgruntled Labor Force**
To strengthen their balance sheet, Northwest has imposed $1.4 billion cuts in annual labor expenses. These expense cuts include salary cuts, layoffs and pension plan reductions. Under Chapter 11, Northwest has reached agreements
with union leadership, including Air Line Pilots Association (ALPA), the Aircraft Mechanics Fraternal Association (AMFA), the Aircraft Technical support Association (ATSA), the International Association of Machinists and Aerospace Workers (IAM), the Northwest Airlines Meterologists Association (NAMA) and the Transport Workers Union of America (TWU) but has yet to settle disputes with the Association of Flight Attendants-Communication Workers of America (AFA-CWA). Threats of strike by the AFA-CWA have been prevented by the Bankruptcy Court, but in a service industry, strike is not the only method disgruntle voices can be articulated. Northwest will need to solve this problem quickly so the airline can return to business as usual.

**Competition from Low Cost Carriers**

In recent years, legacy carriers have been squeezed by rapid growth of low cost carriers. Most low cost carriers are new entrants, operated by a younger, less organized labor force in comparison to industry averages. Consequently, labor costs are lower for these carriers, driving per unit costs below legacy carriers. The service structure of these airlines differs radically from the traditional hub-and-spoke structure of legacy carriers. Discount carriers fly to smaller more indirect ports, avoiding large fees charged by American's largest airports. The airlines have made simplicity a priority, standardizing seating, boarding assignment, and offering little to none for in flight food services. These airlines typically fly a limited range of plane designs and service a limited market. Most notoriously, Southwest flies only the Boeing 737, and flies 481 of them as of December 2006xxvii. Fleet simplicity is incredibly important in eliminating cost for reasons which will be explained in later sections.

These low cost carriers fly point-to-point service, trafficking passengers in only the most profitable routes. Increased competition from these carriers has dramatically hurt legacy carriers. Even in the wake of legacy bankruptcy, low cost carriers are turning profits and exhibiting strong growth rates, a significant threat to legacy profitability.
Increasing Fuel Costs
Northwest’s fuel bill has become the largest single cost for the airline, reported at $3.3 billion in 2005, compared to only $1.6 billion two years earlier. The recent trend of rising and volatile fuel costs is detrimental to Northwest’s cost structure, especially since the company does little hedging to protect itself. Northwest currently hedges 35% percent of projected fuel for 2007, mainly through put-call collars and fixed price swap agreements. The collar mechanism holds fuel prices between $53 per barrel and $72 per barrel and account for roughly 20% of the company’s projected 2007 fuel consumption. Fixed price crude oil swaps account for 10% of the projected fuel requirements, setting prices at and around $62 per barrel. However, these hedges will expire at the end of 2007, leaving Northwest fully exposed to volatile fuel prices if new contracts are not renewed. In 2004, the company estimated for every one cent increase in fuel costs, Northwest’s annual fuel bill increases by $17 million. According to the DOT, airline fuel prices rose 29 cents per gallon from 2003 to 2004, costing Northwest an estimated $493 million in increased fuel costs. Since then, fuel costs have nearly doubled, domestically reported at $1.81 per gallon compared to $1.13 per gallon in 2004. With continued political unrest in the Middle East, recent disaster weather disrupting petroleum supply and distribution, and with the increasing fuel demand from fast growing economies like Chinese and Indian, this problem is likely to get worse for airlines.

High Insurance Premiums
Following the September 11th, 2001 attacks, realized risk has become greater in the airlines industry. To compensate the rise in risk, major airline insurers have increased premiums and reduced maximum coverage. The government, under the Federal Aviation Administration (FAA), has underwritten airline insurance for war related losses, under the Homeland Security Act 2002 and its amendments. But this coverage is set to expire in mid August 2007, leaving airlines seriously exposed to risk. Since the Transportation Security Administration (TSA) is the governing body in airport security, airlines have little control over exposure to terrorist attacks, though would be liable to lawsuit if the
Homeland Security Act is not renewed and another attack occurs. Insurance coverage as is caps exposure, leaving airlines on their own concerning large scale mega-risk.

**Pension Plan and Benefit Risk**

(i) **Heath Care Costs**
With long term medical coverage obligations, Northwest is at risk to health care cost increases. It is estimated a one percentage-point increase on assumed health care costs would increase the total cost of coverage by $10.4 million and would increase the total cost on accumulated postretirement benefit obligation by $73.7 million annually. The steady state cost increase was assumed to be 5%, though a 8.5% increase was used to discount immediate years. These costs are highly variable and could pose a problem for the airline, considering the mushrooming market of health care demand and the political nature of health care services.

(ii) **Insurance Premiums on Pension Programs**
Insurance premiums on pension programs also present a possible problem for Northwest and the airline industry as a whole. In the economic downturn following September 11th, airlines were allowed to defer up to 80% of their pension obligations\(\text{xxx}\). As an industry, airlines contributed little to pension plans in 2004 and 2005, building up large unfunded pension plans. When several major airlines went under, these obligations were passed on to the Pension Benefits Guarantee Corporation, the PBGC. Currently, airlines pay a long term, fixed premium to the PBGC. With an estimated $22 billion in under funded pension programs in 2005, the PBGC is unable to cover benefits programs and the system will have to turn to a taxpayer bailout. The Executive Director of PBGC, Bradley Belt, has been working hard to restructure the system\(\text{xxxi}\). His lobby supports a variable rate pension insurance program, where companies with healthy pension programs are awarded the traditional flat rate insurance premium while under funded pension programs will be taxed a variable rate insurance policy. For Northwest this could prove costly, since in 2006,
Northwest Pension and Benefit Plans were net under funded by ($3.095) billion and the corporation has an affirmed its obligation to payout $3.3 billion to its defined benefit plans. Any additional cost associated with an already troubled pension plan will be problematic.

**FINANCIAL ANALYSIS**

**Operational Finances**

For the first time in the last five years, operating income was positive for the airlines, reported at $740 million compared with the annual losses of $919 million in 2005 and $505 million loss in 2004. Total operating revenue in 2006 was 12.568 billion, an increase of $282 million or 2.2% from the year before.

This increase is attributed to higher passenger revenues, up 3.7% to 9.230 billion from 8.902 billion in 2005. The airline has consolidated its domestic service network, reducing domestic ASMs by 7.9% from 2005xxxii. Northwest reduced total ASMs by 7.48% and, including international routes, reduced overall capacity by 6.7%. The airline made additional cuts in reducing regional carrier networks and aircraft rentals, totaling $373 million in net savings. Cutting capacity has been successful in large part because of increasing passenger load factors. Though total revenue passenger miles have dropped, yields (represented by passenger revenue per RPM) have increased. In 2005, Northwest was making 12.50 cents on passenger revenue per RPM. Today, the airlines turns yields of 13.62 cents. In 2006, Northwest reported a load factor of 84%, up 2.5% from the 2005. (10K)

The main factor in Northwest’s positive net operational income is drastic cost cuts implemented while in bankruptcy. Much of these costs have been reductions in labor expenses. The graph on the following page (mergent) shows total operating costs normalized by operational revenue, to standardize airline size.
The red line indicates a break even line, where costs equal revenue or the ratio equals 1. All legacy airlines were at some time or currently are operating above the break even line, where costs are greater than revenue and net income is negative.

The sharp decline in Northwest’s line (dark blue) indicates the successful implementation of desired cost cuts. Coming into 2006, Northwest enjoyed higher yields to expenses than other major airlines, outperformed only by Southwest Airlines.

To realize these structural gains, Northwest cut operational costs $1.377 billion or 10.4%. These gains came mostly from labor and benefits reductions. Salaries, wages and benefit expenses were slashed by 29% to $2.662 billion from $3.721 billion the year before. The annual contribution to pension and postretirement benefit programs dropped 43% or $196 million from 2005 to 2006. When Northwest emerges from bankruptcy court later this year, the airline should be sleeker and more efficient, but this restructuring occurred at the expense of massive concessions made by 30,000 Northwest employees.

According to the corporation’s estimates, Northwest has achieved successful restructuring and will be able to compete when it emerges from bankruptcy court later this year. Estimates rank Northwest airlines more efficient in CASM in comparison to other legacy airlines and even competitive with discount carriers. (restructuring report) This is a feat, considering Northwest has recommitted to
pension plan obligations, an admirable decision when many major airlines have decided to pass obligations on to the PBGC.

**Estimated Labor Costs per Air Seat Mile**

<table>
<thead>
<tr>
<th>Airline</th>
<th>CASM (Cost per Available Seat Mile)</th>
<th>Relative Rank</th>
<th>CASM (excluding fuel, profit sharing agreements)</th>
<th>Relative Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>American</td>
<td>4.1 (cents)</td>
<td>8</td>
<td>8.4 (cents)</td>
<td>6-7</td>
</tr>
<tr>
<td>United</td>
<td>3.3</td>
<td>7</td>
<td>9.0</td>
<td>8</td>
</tr>
<tr>
<td>Continental</td>
<td>3.1</td>
<td>6</td>
<td>8.4</td>
<td>6-7</td>
</tr>
<tr>
<td>Delta</td>
<td>2.6</td>
<td>5</td>
<td>7.4</td>
<td>4</td>
</tr>
<tr>
<td>US Airways</td>
<td>2.5</td>
<td>4</td>
<td>7.2</td>
<td>3</td>
</tr>
<tr>
<td>NWA</td>
<td>2.5</td>
<td>3</td>
<td>7.7</td>
<td>5</td>
</tr>
<tr>
<td>Southwest</td>
<td>2.4</td>
<td>2</td>
<td>4.8</td>
<td>1</td>
</tr>
<tr>
<td>JetBlue</td>
<td>2.0</td>
<td>1</td>
<td>5.7</td>
<td>2</td>
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</table>

Since going bankrupt, Northwest’s common stock has lost all real value. Today, the common stockholders’ equity is -$7.991 billion. Even the most optimistic of shareholders expect no return on their stockholdings. The collapse of Northwest airline stock (see below), makes normal valuations, including a DCF DuPont, on the company meaningless. Little is said about the company when price to book is N/A and diluted EPS is -32.48. The most appropriate valuation is through industry comparables, both to legacy airlines and discount airlines.
Ratio Comparables

In 2006, Northwest posted a positive 35.48 ROE, return on equity. However, this statistic is misleading. In 2006 Northwest’s net income was -$2.835 billion, and shareholder equity was negative as well, so the company has a positive ROE. This positive ROE is actually telling of financial disaster, apparent with the -21.45 ROA. Despite cost restructuring, Northwest is struggling to get back on its feet.

Encouraging of turnaround progress, Northwest had a positive .049 gross margin in 2006. Comparative, Northwest posted gross margins above US Airways, Continental, American Airlines and Delta. However, Southwest and Jet blue had higher margins, but that is to be expected with their low cost structure and lower volume sales. Competitive gross margins seem to indicate Northwest has successfully cut costs and restructured its service network.

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</tr>
</thead>
<tbody>
<tr>
<td>Return on Equity (%)</td>
<td>-38.12</td>
<td>106.34</td>
<td>45.63</td>
<td>-0.11</td>
<td>7.74</td>
<td>1.16</td>
<td>35.48</td>
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<tr>
<td>Return on Assets (%)</td>
<td>0.79</td>
<td>3.26</td>
<td>-31.61</td>
<td>-0.02</td>
<td>3.71</td>
<td>0.1</td>
<td>-21.45</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>10.04</td>
<td>14.94</td>
<td>-93.66</td>
<td>5.81</td>
<td>36.51</td>
<td>8.62</td>
<td>-59.21</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>0.045</td>
<td>0</td>
<td>0.04</td>
<td>0.053</td>
<td>0.064</td>
<td>0.03</td>
<td>0.049</td>
</tr>
<tr>
<td>EBITDA of Revenue (%)</td>
<td>9.83</td>
<td>6.54</td>
<td>7.77</td>
<td>11.89</td>
<td>15.77</td>
<td>7.38</td>
<td>10.02</td>
</tr>
<tr>
<td>Operating Margin (%)</td>
<td>4.7</td>
<td>3.56</td>
<td>0.34</td>
<td>5.37</td>
<td>10.28</td>
<td>2.79</td>
<td>5.89</td>
</tr>
<tr>
<td>Pre-Tax Margin</td>
<td>1.02</td>
<td>2.81</td>
<td>-40.58</td>
<td>0.38</td>
<td>8.69</td>
<td>0.24</td>
<td>-22.79</td>
</tr>
<tr>
<td>Net Profit Margin (%)</td>
<td>1.02</td>
<td>2.61</td>
<td>-36.12</td>
<td>-0.04</td>
<td>5.49</td>
<td>0.14</td>
<td>-22.56</td>
</tr>
</tbody>
</table>
In terms of short term liquidity, Northwest is in good position compared to its peers. The company’s quick ratio is above that of Delta, America Airlines, US Airways and Southwest. The success of Northwest’s restructuring shows itself in their high current ratio. The airline has increased its cash and cash equivalents 113.00% to $1.461 billion from $684 million the year before. High liquidity is an important factor in applying for private and government loans. In future financing and growth, Northwest should be able to take advantage of high liquidity, building lender confidence despite poor current credit scores.

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</tr>
</thead>
<tbody>
<tr>
<td>Quick Ratio</td>
<td>0.73</td>
<td>0.84</td>
<td>0.75</td>
<td>0.91</td>
<td>0.69</td>
<td>0.68</td>
<td>0.84</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>0.81</td>
<td>1.04</td>
<td>0.93</td>
<td>1.09</td>
<td>0.9</td>
<td>0.79</td>
<td>1.11</td>
</tr>
<tr>
<td>Working Capital/Total Assets xxxv</td>
<td>-0.06</td>
<td>0.02</td>
<td>-0.02</td>
<td>0.02</td>
<td>-0.02</td>
<td>-0.07</td>
<td>0.03</td>
</tr>
</tbody>
</table>

To strengthen the balance sheet, Northwest has made considerable strides in eliminating debt. Under the protection of Chapter 11, Northwest eliminated 1.871 billion in unsecured debt, including 1.494 billion in unsecured notes and .375 in unsecured convertibles. As a result, every major credit agency, most notably S&P and Moody’s, has downgraded Northwest credit ratings to minimal scores on all long term bonds. (S&P Moody’s) Despite debt reduction, Northwest is still burdened with over $4.1 billion in total debt. (10K) Debt ratios as seen below are tough to compare to industry averages since Northwest shareholder equity is negative. However, Northwest’s debt performance can be gauged off of their long term debt to assets ratio. At .3, the airline has lower relative long term debt to assets ratio when compared to the rest of the industry, excluding southwest. This should bolster investor confidence and allow the company to secure additional borrowing. Many of the bonds included in Northwest’s long term debt have low credit scores, but a likely restructuring turn-around will sure to upgrade these scores.
At the expense of shareholders and employees, Northwest appears to have turned around distressed financial books. If the airlines is able to continue generating positive net income revenues in the upcoming years, its financial health along with its credit rating stand to improve.

**STRATEGIC ISSUES AND RECOMMENDATIONS**

**Asian growth**

Despite losing the recent US-China passenger service bid, Northwest has a strong position in Asian air markets. Gotham Global believes US-Asian air routes present great opportunity as a source for Northwest profit streams. Domestic Asian airlines are growing at encouraging rates. In India, the domestic airlines are growing at such alarming rates, the government under the leadership of Civil Aviation Minister Praful Patel has recently stepped in to curb expansion, fearing unhealthy over development that would repeat the 1991 collapse of the airlines industry. In China, the domestic airlines industry has also seen tremendous growth. These networks will provide the freedom for Northwest passengers to fly to destinations all over Asia, not just international hubs. Strong domestic airlines in Asia will also channel Chinese and Indian passengers into Northwest’s international network.
Key in Northwest’s integration into Asian domestic markets will be affiliations and code sharing agreements. Gotham Global believes Northwest should push these partnerships before Chinese markets liberalize and the first mover opportunity is gone. Northwest’s affiliation with China Southern Airlines and Korean Air, through Skyteam will open doors into the Chinese domestic market. Korean Air currently has strong affiliations and code-sharing agreements with many Chinese airlines, including Air China, China Airlines, Shanghai Airlines, China Eastern Airlines\textsuperscript{xxxvii}. Northwest must extend its network and reservations system to these smaller Chinese airlines in anticipation of market growth and ‘open skies’ legislation.

Though Northwest, as a privileged server, currently benefits from regulated Chinese airways, Gotham Global believes the market will be liberalized within years and Northwest should prepare to meet this dynamic change.

“At long last, change may be in the air for travelers crossing the Pacific. During a trip to China last week, U.S. Transportation Secretary Mary Peters touted a new round of talks between Washington and Beijing over an "open skies" agreement. A tentative deal could be hammered out as early as next month, not a moment too soon for fliers in this under-supplied market” WSJ April 18\textsuperscript{th} 2007

The Chinese government currently protects infant domestic airlines from international competition through strict regulation. But with the upcoming Beijing Olympic games in 2008, and with increased US pressure, protectionism is prime to be revoked. We, at Gotham Global believe China will soon follow suit with the recently signed EU-US “open-skies” agreement. To capitalize on this opportunity, Northwest must develop stronger relationships with Chinese carriers. An interest in Indian air travel will be equally important, with US-India business developments exhibiting similar trends and growth rates.

**Fuel Costs**
As described above, fuel volatility has crippled the airline industry in recent years and long term hedging against future jet fuel increases will determine whether or not Northwest’s emergence from bankruptcy will be successful. Fuel prices tend to cycle and today’s prices are lower than the spike in 2005-2006, providing a fleeting opportunity to lock in fuel prices. However, to protect from additional fuel price declines, Northwest should collar hedge bets rather than lock in fuel swaps.

Gotham Global also believes opportunity rests with pooled fuel purchasing. If allowed by the IATA, Northwest should work through its KLM partnership or Skyteam Alliance to broker fuel deals. With ten major airlines, the alliance would have significant buyer power to bring down premiums charged by fuel distributors. This opportunity will hinge on anti-trust rulings to come. But, Northwest-KLM partnership’s unique immunity clauses to anti-trust law may allow international partnerships the right to coordinate purchases. If permitted will open the door on other opportunities for Skyteam to flex buyer power muscle, possibly encompassing negotiations of airport usage fees and fleet contracts.

**Domestic Strategy**

To successfully emerge from bankruptcy, Northwest must maintain a restricted domestic market. The airlines should focus on withdrawing from strong discount carrier markets. Low cost carriers have continually outperformed Northwest in domestic service and are expected to continue growing. However, restricted by their inherit cost structure, low cost carriers are unable to expand into many route services in the domestic market - There will be a significant market discount carriers cannot fly in the US.

The two models of airlines, legacy opposed to LLCs, operate fundamentally different network services and legacy airlines need implement growth strategies that emphasize its unique competitive advantage.
Room for Domestic Expansion: Northwest can go above and below discount carriers.

Above LLCs
Discount carriers do not have the ability to fly internationally. Forty years ago, legacy carriers developed the hub-and-spoke structure to gather passengers and fly them across the country. Today, point-to-point discount airlines also have this ability. The hub-and-spoke structure should be remodeled to optimize passenger consolidation for international rather than national travel. Fortunately, this is a market in which Northwest already has a strong platform of global alliances. Based on international liberalizing agreements and expected growth in Asia and US-World business, we believe the international air passenger traffic will increase at greater rates than the domestic market. Gathering domestic passengers for international travel will be a profitable and growing endeavor.

Below LLCs
Through Airlinks, (Pinnacle, Mesaba and Compass), Northwest is in a strong regional jet position. Recent trends of airline consolidation will leave regional jet markets open for growth. As a result, regional jets will have rising load factors, making regional jet travel profitable. Regional jets are not competing with discount carriers, instead, regional jets offer premium travel to high demand businessmen. By servicing markets underneath discount carriers, Northwest will not be subject to price competition and will be able to maintain high yields.

By moving away from LLC competition, Northwest will be competing exclusively with legacy carriers. Following restructuring, Northwest is highly competitive with these airlines based off CASMs estimates and should thrive.

\[ii\] Northwest Airlines Annual 10K. http://www.nwa.com
\[iv\] http://www.answers.com
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