AIR TRANSPORT AND THE BAY AREA ECONOMY

Crisis in Air Travel: Weathering the Downturn

Bay Area Economic Forum
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Previous BAEF Airport Studies

This is the fourth in a series of reports by the Bay Area Economic Forum (BAEF) on regional airport infrastructure, in cooperation with the region’s three major international airports – San Francisco (SFO), Oakland (OAK) and San Jose (SJC).

Phase One, released in January 2000, evaluated the direct and indirect economic contributions those airports make to the Bay Area economy, and the extent to which regional economic activity depends on viable air cargo and passenger services and facilities.

The November 2000 Phase Two report used Metropolitan Transportation Commission passenger and cargo demand projections through 2020, airport and Federal Aviation Administration flight delay data, and the Economic Forum’s own economic modeling, to analyze potential economic impacts of plans to expand regional airport capacity to meet future demand, and of the consequences of a failure to meet projected demand growth.

A September 2001 BAEF report specifically analyzed the role of Bay Area international airports in moving air freight, including high technology exports from Silicon Valley.

The following report examines the decline in air transportation in 2001, particularly post September 11; its impact on airport operations, costs and services; and the economic effects on Bay Area communities heavily dependent on vacation and business travel.
EXECUTIVE SUMMARY

The combined impacts of economic recession in 2001 and the aftermath of the September 11 terrorist attacks in New York and Washington demonstrate the close relationship between air transportation and the economy of the Bay Area.

Major sectors of the Bay Area economy, including technology, business services and the visitor industry, had already begun to experience a slowdown beginning in early 2001, which continued through the year. Businesses limited their travel budgets to control costs, and a strong dollar dampened international business and leisure travel.

Post-September 11 concerns about airline safety and airport security delays accelerated pre-existing trends in the air travel industry, resulting in layoffs, reduced flight schedules and significant financial losses to the airports and to the Bay Area's $6 billion visitor industry. Direct impacts in the air transportation, hotel, restaurant, car rental, parking lot, hotel, restaurant, retail and related businesses have reverberated through the larger Bay Area economy, as lost paychecks and reduced airport and visitor activity have reduced spending on local goods and services.

Among the findings in this report:

- Leisure travelers have begun flying again, but many are avoiding longer trips and major cities; global recession, a strong dollar, security concerns and flight delays have cut sharply into international travel.

- Business travel remains down sharply, especially for smaller hotel conferences and meetings; corporate travel planners are focusing on shorter trips, non-stop flights and fare discounts, as well as on private jets using smaller regional airports, rental cars for shorter intercity trips, and teleconferencing.

- SFO, with its United Airlines hub and extensive schedule of international flights, has felt the greatest impact from September 11 with passenger traffic and flights down 20-25% and cargo off 23%; San Jose (SJC) has experienced comparable declines; Oakland (OAK) has been affected least, due to its mix of shorthaul passenger airlines, jet freighter cargo and integrator business, and mail hub service.

- Bay Area hotel occupancy fell to 45% immediately after September 11, and has since risen to 55-60% in the Peninsula and the East Bay, and 60-65% in San Francisco – still well below an average 75-85% throughout the Bay Area last year.

- Approximately 5,000 airport-related workers, from flight attendants and aircraft machinists to hotel and restaurant, parking lot, car rental and retail employees have been laid off in San Mateo County alone since September 11.
• Airport and city center hotels, restaurants and stores are bearing the brunt of the slowdown.

• Counties such as Napa and Monterey have benefited from increased California visitors, arriving by car and air, who perceive greater safety in visiting rural locations than a large city.

• Cities and counties near the three major Bay Area airports are being forced to cut their FY 2001-2002 budgets and public services as a result of lost hotel and sales tax revenues.

A number of short-term measures have been proposed, at the federal and state levels, to encourage air travel and address the fallout from September 11. These proposals, which each need to be evaluated in light of their policy implications, effectiveness, and the timing of their implementation, are not the primary focus of this report, which concerns the importance of the travel and air transportation industries to the Bay Area economy, and the need for long-term investment in regional airport capacity.

Long-term policy issues include the cost and implementation of increased airport security mandated by the federal government, and whether or not the events of September 11 will lead to permanent changes in the air passenger and cargo markets.

The decline in air travel in 2001, and in particular its economic impacts post-September 11, add new perspective to the ongoing public debate over regional airport expansion. In particular, the recent drop in air traffic suggests the scale of lost economic benefits to the region if its airport system is unable to accommodate future travel and air cargo demand.

The current 20-25% reduction in flight operations by major air carriers at SFO and SJC is comparable in its economic impact to “demand management” scenarios earlier outlined by the Metropolitan Transportation Commission, and by an April 2001 report by Charles River Associates. In the latter report, demand at SFO is reduced to levels the airport can accommodate with current infrastructure (i.e., without new runways), through a combination of technology, larger aircraft and the capping of flight operations. It estimates that an 18-21% reduction in arrivals at SFO would be required to achieve a level of congestion relief equivalent to what would be provided by new runways. As shown by the fall in air traffic in 2001, reduced flight operations below either sustained historical levels or projected future levels entail significant immediate and long-term economic costs. These costs have major consequences for the Bay Area generally and the travel and tourism sector in particular.

Economic models suggest that, if post-September 11 trends at SFO were to continue over one year, combined direct and visitor industry losses could amount to as many as 51,000 jobs, $1.2 billion in personal income, $4.6 billion in business revenue and $310 million in lost hotel, sales, property and other tax revenues to cities, counties and the state.
Fewer flights through Bay Area airports since September 11 has relieved airport congestion and improved on-time performance—but at a high cost in airline, airport, hotel and travel-related jobs, and in indirect impacts spread throughout the economy. Heavier than expected 2001 holiday travel illustrates the difficulty, especially for hub network airlines, of scaling up service to meet surges in demand once flight schedules have been reduced. Several days of dense fog in early January 2002 caused renewed delays at SFO, indicating that bad weather capacity remains an issue despite recent flight reductions.

It remains to be seen whether, due to the impacts of September 11, specific segments of the air transportation market such as business travel will see structural changes that limit their recovery. Overall, however, the likelihood of a major structural change in the demand for air travel is small. Air passenger and cargo demand can be expected to recover as the economy improves and as adjustments are made by consumers to the new security environment. Therefore, with only minor revisions, long-term projections of future air transportation demand should remain valid for planning purposes.

The crisis in air travel graphically demonstrates the importance of air transportation to the Bay Area's economy. Recent events have provided an opportunity to "see" the future losses to the Bay Area's economy if policies are adopted that cap airport demand and allow future growth to go elsewhere. It is essential, therefore, that planning and related activities continue for the infrastructure investments required to meet the Bay Area's long-term economic and air transportation needs.

1. AMID ECONOMIC UNCERTAINTY, THE UNTHINKABLE

Despite the horrifying television images and the immediacy of continuous news coverage, most of the direct impacts – the targets, the loss of life and physical damage – occurred thousands of miles away, in New York, Washington and Pennsylvania. Yet the unforeseen long-term effects of September 11, in combination with economic trends dating back to early 2001, may ultimately hit the Bay Area at least as hard as any other metropolitan area in the nation.

At its heart, the attack was a commercial airline disaster. In its immediate wake, all commercial flights over U.S. airspace were grounded for two days. Passengers were prevented from traveling or stranded where they were visiting. For the better part of a week, airfreight in the U.S. market did not move. International visitors were not allowed in or out. Concerns about airline and airport security, and later about delays related to security improvements, discouraged passengers from traveling. A subsequent anthrax scare slowed mail and air parcel delivery.

Business travel, which accounts for 50% of passengers but 65% of airline revenues, had already slowed considerably during 2001 as companies struggled to manage costs during the economic downturn. After September 11, organizers canceled conventions. Business meetings and conferences scheduled at hotels in major U.S. cities declined sharply. Many
international business and leisure travelers perceived that the U.S. was a potential terrorist target and an unsafe place to visit. The economic impact has been devastating nationwide.

**A Nationwide Crisis**

An October Wall Street Journal report estimates the cost of the attack to the national economy in 2001 alone at $100 billion, not including losses and damage in the attack itself.

In September, airlines flew 16.5 billion fewer paid passenger miles than in September 2000. Nine major U.S. airlines saw revenues fall 45% in September and further in October, just as new pilot and other union contracts, which account for more than a third of airline costs, were taking effect. Industry-wide contract talks with aircraft machinists deadlocked, and the Bush Administration intervened twice to avert strikes against United Airlines and Northwest Airlines.

Insurance costs, meanwhile, have tripled since September 11 and since a subsequent November 12 American Airlines crash in Queens, New York. Many airlines operate hub-and-spoke services that make it difficult to take planes out of service or eliminate cities from their networks as a way to achieve cost savings. Nonetheless, the nine major carriers have announced a combined reduction of more than 100,000 jobs and canceled 20% or more of their scheduled flights. In all, they are expected to post $6.4 billion in losses for 2001 and 2002 losses are currently forecast at $2-2.5 billion.

Elsewhere in the economy, orders for 32 Boeing aircraft were canceled or in jeopardy immediately following the September 11 attacks. Some 1.9 million hotel rooms sat empty each day during the rest of September, a third more than the monthly total in the previous year. Hotel occupancy nationwide is projected at 60-65% for 2001, a significant decline from 2000, according to hotel industry consultants PKF Consulting. Avis Rent a Car alone returned more than 42,000 fleet vehicles to manufacturers, and Alamo Rent a Car has filed for Chapter 11 bankruptcy.

October figures show improvement in passenger traffic, but at lower fares and with some troubling trends. Leisure air passenger travel remains down 30%, but more lucrative business travel is down 44%. Even after canceling one out of five flights, the major passenger airlines reported planes less than two-thirds full during October. Despite healthier than expected demand over the holidays, airline passenger traffic for all of 2001 is expected to show a 3% decline, after five years of solid 8% annual growth.

The Travel Industry Association forecasts an overall 3.5% drop in domestic travel and a 13% decline in international arrivals for 2001 compared to 2000. That translates into a potential loss of nearly $43 billion in travel expenditures and some 453,000 travel and visitor-related jobs. According to TIA, California is the top travel destination among U.S. states. San Francisco and the Bay Area ranks number 5 among U.S. metro area destinations, above Las Vegas and Honolulu.
A September National Business Travel Association survey of its 2,400 member travel managers and service providers shows 58% of respondents saying their companies plan to reduce corporate travel for combined economic and security reasons. Another 65% say they plan to increase use of car rentals instead of flights for shorter trips, and 88% say they will expand use of videoconferencing in place of travel.

Traffic World magazine, which covers the air cargo industry, reports that seven top U.S. carriers saw an average 21% drop in third quarter air cargo sales, to $789 million this year from approximately $1 billion in third quarter 2000. Initially hit by the economic downturn, a U.S. Postal Service security decision to prohibit combination passenger-cargo flights from carrying pieces of mail over 16 ounces cut off a key revenue stream for airlines just as the holidays were approaching. Rather than develop a separate identification and tracing system for these pieces, USPS has diverted them to FedEx Express, dedicated charter flights and trucks. Across the board 20% personnel cuts by major airlines have been extended to their cargo operations.

The Region’s Airports Share the Pain

Bay Area airports have been impacted to different degrees by the overall U.S. economic downturn, and the events of September 11. And they have been affected by each in different proportions based on the types of passenger and cargo markets they serve.

Consider the following trends as a context for measuring airport and local community impacts:

- Domestic passenger travel has shown greater recovery than international.
- Short-haul flights are attracting more travelers than transcontinental ones.
- Car rentals have gained in popularity relative to short commute flights.
- Vacationers are showing a preference for non-urban destinations.
- Business travel for hotel conferences, meetings and, to a lesser extent, conventions, is down markedly.
- Business travelers increasingly seek non-stop flights and avoid congested airports.
- Pure cargo air services, including parcel express services, have fared better than cargo operations utilizing passenger jets and schedules.

At its October meeting, the Bay Area Business Travel Association (BABTA), a local industry group of corporate travel planners and consultants, noted that: business travel has been cut severely; more business is being handled by teleconferencing and videoconferencing; planners are renegotiating airline and hotel group contracts; companies
are shifting travel to corporate jet time shares through smaller regional airports and replacing short commute flights with car rentals. These changes could hold significant implications for longer-term business travel, even after an economic recovery.

Business travel had begun falling well before September 11. United, SFO’s largest carrier, reported a 34% drop in business-class passengers through the airport in second quarter 2001. San Francisco International Airport (SFO) has been hit hardest by current market trends. Commercial airline flight operations are down 8% for the first 10 months of 2001 versus 2000, from 274,000 to 260,000 – but were down more than 19% in the month of October from the previous year. Total passenger traffic is down almost 14% through October, from 34.6 million to 29.9 million, but the October 2001 passenger total was down nearly 33% from October 2000, with 1.2 million fewer passengers.

Statistics provided by SFO indicate a sharp relative falloff in international passengers since September 11. Domestic passenger volume during January-October 2001 fell 16% from 2000 as the economy weakened, business travel slowed, and some travelers shifted to Oakland (OAK) or San Jose (SJC) for lower fares or convenience. International volume showed only a 3.9% decline during the January-October period. But for the month of October 2001, domestic and international passenger traffic were off by 33% and 32%, respectively, from the previous year.

A much larger share of SFO cargo, and particularly international cargo, moves in the bellies of commercial passenger jets than at OAK and SJC. SFO has seen year on year cargo volume fall 23%, from 583,000 to 449,000 metric tons during January-October, and 36.1% for October alone, as airlines grounded passenger flights and cargo migrated to carriers with pure freighter service.

Some of that cargo may migrate permanently, since all-cargo jets will not be subject to the same security screening restrictions – special checks of shipments involving an unknown shipper or forwarder, particular cargoes or destinations, multiple screenings and inspections on non-direct flights, etc. – imposed on passenger airlines in 2002.

Mail shipments have declined 30% for January-October compared to the same period in 2000. While international mail was down less than 14%, domestic mail was off by a third. Overall mail volume for October was down 43% from October 2000. Domestic mail alone was down 48%, reflecting the September change in Postal Service policy.

San Jose experienced a net increase in passenger traffic during the first 10 months of 2001 over 2000, from 10.8 million passengers to 11.3 million. Those numbers mask both strong growth in the first half, and a sharp falloff in September (32%) and October (24%). Passenger volume in October 2001 was down nearly 24%, from more than 1.1 million to fewer than 873,000, compared to the previous year. New international services to Paris and Taipei have been particularly hurt since September.

Air parcel express and other pure cargo airline services account for most of SJC’s cargo business. The airport experienced a 20% drop in liftings for September compared to 2000,
as flights were grounded after the 11th, but recovered considerably in October. Cargo volume in October was 14,444 metric tons, less than a 4% drop from the year before. Mail is not a major component of SJC’s business, but was down 60% in September and 53% in October 2001, from October 2000.

The most significant decline at SJC has been in business travel as meetings and conventions have been canceled, postponed or underattended, and declining business activity in Silicon Valley – merger and acquisition activity, meetings with venture capital firms and prospective partners, engineers imported on work visas, family visits, etc. – has reduced travel in and out of the area.

### TABLE 1
**Comparative Traffic at Bay Area Airports – October 2001 vs. 2000**

<table>
<thead>
<tr>
<th>Passengers</th>
<th>October 2000</th>
<th>October 2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFO</td>
<td>3,456,349</td>
<td>2,332,745</td>
<td>-32.5</td>
</tr>
<tr>
<td>OAK</td>
<td>929,831</td>
<td>885,680</td>
<td>-4.7</td>
</tr>
<tr>
<td>SJC</td>
<td>1,144,952</td>
<td>872,759</td>
<td>-23.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cargo (Tons)</th>
<th>October 2000</th>
<th>October 2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFO</td>
<td>62,708</td>
<td>40,084</td>
<td>-36.1</td>
</tr>
<tr>
<td>OAK</td>
<td>62,782</td>
<td>53,818</td>
<td>-14.3</td>
</tr>
<tr>
<td>SJC</td>
<td>15,036</td>
<td>14,444</td>
<td>-3.9</td>
</tr>
</tbody>
</table>

Sources: *SFO, OAK, SJC*

At first glance, August-October figures for Oakland suggest relatively slight impacts from September 11, except for the month of September itself. August 2001 passenger traffic was up from the same period in 2000, to 1.2 million, reflecting continued strong intercity U.S. traffic and strong performance of low-cost carriers such as Southwest Airlines and US Airways. OAK carriers also offered the attraction of lower fares, easier parking and reduced congestion during a cloudy summer affecting landings at SFO.

September, however, saw passenger volumes fall sharply from August, to 677,000. Cargo flight operations fell by around 20% to 857. That represents nearly a third fewer takeoffs and landings from the 1,209 operations in September 2000. Cargo volume fell from 110.6 million pounds to 94.9 million. But all of those figures have rebounded in October. Interestingly, concession revenues are up year to year at OAK, in part due to increased security and longer waits.

October 2001 passenger traffic at OAK was nearly 886,000, down from 930,000 in October 2000. While the difference in numbers isn’t huge, behind them is an important shift in the
passenger profile, with more leisure passengers choosing OAK as a gateway to the Bay Area, and business travelers down significantly. Thus, while OAK has been somewhat insulated from both the downturn and September 11, the East Bay and the City of Oakland in particular have been affected more deeply.

The slowdown in the cargo and the business travel segments of the market that began in early 2001 reflected a dramatic reversal in the national and Bay Area economies—particularly high-tech manufacturing and in technology-related business services.

2. BEHIND THE DATA: REAL WORLD IMPACTS

The trends during the first and second quarters were unequivocal:

- Non-agricultural job growth slowed from an average 14,000 jobs per month in 2000 to 4,500 in first quarter 2001 to a net loss of 25,000 jobs in the second quarter. Construction, manufacturing, transportation, trade and business services all dropped sharply.

- While overall Bay Area employment fell by 2.9% in the second quarter, high-tech manufacturing employment and business services employment declined by roughly 6%, costing 11,000 jobs in these two categories alone.

- Office vacancy rates jumped from 1.6% in second quarter 2000 to 10.3% in second quarter 2001 in San Francisco; from 0.7% to 8.1% in San Jose; and from 2.8% to 8.9% in Oakland.

The third quarter 2001 office vacancy rate in San Francisco rose to 15.2%. The resulting emptying out of commercial areas in the city has cut into business at restaurants and nightclubs, home and car sales, retail purchases and travel.

In And Around The Airports

Throughout the Bay Area business closures, falling stock values, tight credit and venture funding, cost cutting and layoffs cut heavily into discretionary travel by companies and individuals. September 11 accelerated the crisis for Bay Area airports. Passenger traffic at SFO fell by half in the two weeks immediately following September 11, and at the end of 2001 stood at 80% of 2000 levels. For the world’s ninth busiest airport, which handled 40.2 million passengers last year, those numbers are significant. Flight operations are at 75% of 2000 levels. Concession revenues at the airport are down 25-30%. Parking receipts are down 40%.
SFO expects a $100 million budget shortfall in fiscal 2001-02, including projected losses of $31-37 million in landing fees due to reduced flights; $21-25 million in parking revenues; and $30-40 million in renegotiated restaurant and concession revenues due to fewer travelers and a reduced workforce at the airport itself. Since SFO pays 15% of concession revenues back into the city of San Francisco’s general fund, the reduced revenues could alone take as much as $8.5 million out of the next city budget. No airport staff have been laid off, but SFO’s authorized staffing level of 1,900 has been allowed to shrink to 1,550 by attrition during 2001, and a hiring freeze is in place post-September 11. United Airlines, meanwhile, has announced 2,600 layoffs of machinists, cargo handlers, flight attendants, customer service and other personnel at the airport as a result of canceling a quarter of its flights through SFO. American Airlines’ across-the-board 20% personnel reduction nationwide is expected to extend to its SFO staff.

The San Mateo County Labor Council reports some 5,000 lost airport-dependent jobs in that county alone since September 11. Half are the United job cuts, including more than 1,000 flight attendants laid off or placed on three-month furloughs. Airport service contracts have been canceled with Language Management Resources for 30 translators assisting international passengers; with Pacific States Airline Services for 20-30 skycaps; and with Polaris Research Development, for 30 visitor information employees. Most of the remaining jobs are offsite at hotels, restaurants, car rental offices, airport transit, private parking lots and other businesses that primarily serve airport customers. Many more workers around SFO have been cut back to part-time hours or partial salaries, according to Labor Council representatives providing layoff assistance.

Baggage screeners and other security personnel have not been affected as much, because under SFO’s Quality Standards Program they receive “living wage” salaries of $10.45-11.70 an hour – higher than at most airports nationwide. The program has reduced turnover from 100% annually to 15%, and some other airport workers facing layoffs have moved over to security-related jobs. However, new federal rules took effect January 18, 2002 making U.S. citizenship a requirement for airport security workers. Those changes could have potentially dramatic effects on staffing at all three Bay Area airports, but especially at SFO, where 70% of baggage screeners are legal U.S. residents but not citizens. Another requirement in the law, that screeners be high school graduates, would have disqualified nearly a quarter of the 28,000 screeners nationwide. But the Department of Transportation has since changed its regulations to allow a year’s experience on the job in place of a high school diploma.

Neither OAK nor SJC have laid off employees, although both have hiring freezes in place with some positions unfilled. Individual airlines are consolidating maintenance operations in the Bay Area and cutting back on flight attendants, baggage handlers, ticket agents and other ground personnel. United, for example, plans to reduce its Oakland workforce, which includes a maintenance facility, by nearly 700 and cut 40 employees at SJC. Southwest Airlines, with its low fares and focus on short-haul, non-stop domestic flights has seen its business hold steady and may even add staff at Oakland.
SJC revenues fell in October 2001 to $7.6 million, from $9.3 million the previous October. Much of that drop, nearly $1.2 million, was in parking and roadway receipts, with marked reductions in general aviation revenues – private planes – and in terminal concessions and rentals. Year-to-date, January-October 2001 revenues fell to $38.6 million, from $45.9 million during the first 10 months of 2000. Expenditures increased to $7.9 million from $6.5 million in October 2000, mainly in parking and general aviation expenses. Significantly, security costs grew by $437,000.

Concession revenues at OAK are actually higher this year—$6.1 million for August through October 2001, versus $5.2 million for that period last year – as domestic travel has rebounded and increased security requires earlier airport arrivals and longer waits in terminal gate areas. Parking revenues were higher for August, but down for the three-month period against a year earlier – from $8.6 million to $7.7 million.

**Ripple Effects in the Regional Economy**

As indicated in the Bay Area Economic Forum’s Phase I and II airport reports in 2000, the economic impact of airport activity can be measured directly by airport expenditures, and indirectly as dollars generated through the airports and by visitors arriving by air are spent and re-spent for local goods and services.

The economic effects are clearest in the visitor industry, which employs more than 100,000 Bay Area residents and accounts for more than $6 billion in regional economic output.

Hotel occupancy is perhaps the best indicator. Throughout San Francisco, the Peninsula, San Jose and Oakland, hotel occupancy fell to as low as 45% for the rest of September, before rising over October and November to 56% in San Jose, 59% on the Peninsula and in Oakland, 62% in San Francisco and 65-70% elsewhere in the Bay Area. The industry was experiencing trouble even before September 11. According to nationwide hotel consulting firm PKF Consulting, average hotel occupancy throughout the Bay Area in 2000 was approximately 80%, with San Francisco and San Jose experiencing 80-85% occupancy rates. By March 2001, San Jose hotels were down to 65% and San Francisco was forecasting 73-75% rates for the year, due to a weak economy and a strong dollar that discouraged international business travel and tourism.

Research by PKF shows that the largest hotels and the most expensive rooms saw the steepest occupancy declines, reflecting reduced business travel and fewer large meetings. Room rates had fallen during the January-September period in San Francisco and in the Peninsula, but had risen everywhere else compared to the same period in 2000. In the month of September, however, room rates throughout the Bay Area were down to an average $130 per night, from $153. In October average rates saw some recovery, to $140.

San Francisco hotels may be hurting the most financially: In terms of revenue per available room (RevPAR), an industry tool for measuring profitability, PKF forecasts 66-68% average occupancy for 2001, with an average daily room rate of $160-165, and a RevPAR
of $109 – down more than 24% from the previous year. The linkage between city hotels and the airport is striking: According to the San Francisco Convention and Visitors Bureau, nearly nine out of 10 overnight hotel guests in San Francisco arrive by air, and nearly all of those arrive through SFO.

**TABLE 2**

*Northern California Hotel Occupancy, Jan. - Sept. 2001 vs. 2000*

<table>
<thead>
<tr>
<th>BY LOCATION</th>
<th>2000</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>85.3%</td>
<td>72.5%</td>
<td>-15.0%</td>
</tr>
<tr>
<td>San Francisco Airport</td>
<td>84.1%</td>
<td>68</td>
<td>-19.1%</td>
</tr>
<tr>
<td>San Jose/Peninsula</td>
<td>82.5%</td>
<td>68.2</td>
<td>-20.9%</td>
</tr>
<tr>
<td>Oakland/East Bay</td>
<td>76.7%</td>
<td>64.5</td>
<td>-15.9%</td>
</tr>
<tr>
<td>Monterey/Carmel</td>
<td>80.8%</td>
<td>74.6</td>
<td>-7.7%</td>
</tr>
<tr>
<td>Central Valley</td>
<td>65.7%</td>
<td>64.5</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Sacramento</td>
<td>74.9%</td>
<td>72.2</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Marin County</td>
<td>81.8%</td>
<td>74.4</td>
<td>-9.0%</td>
</tr>
<tr>
<td>Napa/Sonoma Counties</td>
<td>73.0%</td>
<td>66.2</td>
<td>-9.2%</td>
</tr>
<tr>
<td>Other No. California</td>
<td>68.2%</td>
<td>68.7</td>
<td>+0.7%</td>
</tr>
</tbody>
</table>

**Overall Average** 80.5% 69.1% 14.2%

<table>
<thead>
<tr>
<th>BY HOTEL SIZE</th>
<th>2000</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 400 Rooms</td>
<td>85.5%</td>
<td>70.2%</td>
<td>-17.9%</td>
</tr>
<tr>
<td>250-400 Rooms</td>
<td>81.2%</td>
<td>70.6</td>
<td>-13.0%</td>
</tr>
<tr>
<td>150-249 Rooms</td>
<td>76.5%</td>
<td>66.3</td>
<td>-13.3%</td>
</tr>
<tr>
<td>Under 150 Rooms</td>
<td>78.0%</td>
<td>68.7</td>
<td>-11.9%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>BAY AVERAGE DAILY ROOM RATE</th>
<th>2000</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over $110</td>
<td>83.2%</td>
<td>69.5%</td>
<td>-16.5%</td>
</tr>
<tr>
<td>$80-110</td>
<td>79.3%</td>
<td>69.6</td>
<td>-12.3%</td>
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<tr>
<td>Under $80</td>
<td>69.0%</td>
<td>65.9</td>
<td>-4.4%</td>
</tr>
</tbody>
</table>

Source: *PKF Consulting*

The direct economic impact to the city of San Francisco is equally dramatic: hotel tax receipts used for arts, tourist promotion, public works and other programs are down $48 million, or close to 25%, from 2000 totals.
The Bureau notes that large convention business is slowly recovering, after some initial cancellations. The recent Oracle Open World convention, for example, was well attended and brought badly needed business for city restaurants, stores, taxi and limousine drivers, and tourist attractions. A slowdown in individual, international and small group corporate travel, which first became apparent in early 2001, remains the biggest problem.

<table>
<thead>
<tr>
<th>TABLE 3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BY LOCATION</th>
<th>2000</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>88.5%</td>
<td>59.4%</td>
<td>-32.9%</td>
</tr>
<tr>
<td>San Francisco Airport</td>
<td>84.2</td>
<td>53.5</td>
<td>-36.4%</td>
</tr>
<tr>
<td>San Jose/Peninsula</td>
<td>81.2</td>
<td>50.1</td>
<td>-38.3%</td>
</tr>
<tr>
<td>Oakland/East Bay</td>
<td>78.8</td>
<td>54.2</td>
<td>-31.3%</td>
</tr>
<tr>
<td>Monterey/Carmel</td>
<td>87.0</td>
<td>65.2</td>
<td>-25.0%</td>
</tr>
<tr>
<td>Central Valley</td>
<td>68.1</td>
<td>61.0</td>
<td>-10.5%</td>
</tr>
<tr>
<td>Sacramento</td>
<td>76.2</td>
<td>64.8</td>
<td>-15.0%</td>
</tr>
<tr>
<td>Marin County</td>
<td>89.2</td>
<td>63.6</td>
<td>-28.7%</td>
</tr>
<tr>
<td>Napa/Sonoma Counties</td>
<td>83.1</td>
<td>60.4</td>
<td>-27.3%</td>
</tr>
<tr>
<td>Other No. California</td>
<td>76.6</td>
<td>66.6</td>
<td>-13.1%</td>
</tr>
<tr>
<td>Overall Average</td>
<td>82.8%</td>
<td>57.5%</td>
<td>-30.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BY HOTEL SIZE</th>
<th>2000</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 400 Rooms</td>
<td>85.0%</td>
<td>56.6%</td>
<td>-33.4%</td>
</tr>
<tr>
<td>250-400 Rooms</td>
<td>83.6</td>
<td>58.4</td>
<td>-30.2%</td>
</tr>
<tr>
<td>150-249 Rooms</td>
<td>79.3</td>
<td>53.8</td>
<td>-32.2%</td>
</tr>
<tr>
<td>Under 150 Rooms</td>
<td>82.3</td>
<td>60.8</td>
<td>-26.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BAY AVERAGE DAILY ROOM RATE</th>
<th>2000</th>
<th>2001</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over $110</td>
<td>84.4%</td>
<td>55.1%</td>
<td>-34.7%</td>
</tr>
<tr>
<td>$80-110</td>
<td>83.4</td>
<td>61.9</td>
<td>-25.7%</td>
</tr>
<tr>
<td>Under $80</td>
<td>72.8</td>
<td>60.6</td>
<td>-16.7%</td>
</tr>
</tbody>
</table>

Source: PKF Consulting
A survey of Peninsula airport hotels conducted for this report by the San Mateo County Convention and Visitors Bureau reveals across the board declines in occupancy from 15-60%. The largest hits have been in individual and group business travel. Payrolls have been reduced by 8-40%, affecting both hourly workers and managers.

Oakland hotels, which depend heavily on business clientele, saw occupancy fall from 77% to 65% during January–September, with a drop to 55% in September alone. Average room rates fell in September to $114, from $125 in September 2000.

Some parts of the Bay Area have seen only negligible visitor impacts. The Napa Valley Conference and Visitors Bureau, for example, reports less than a 2% drop in tourism to the wine country, which receives 4.5 million visitors annually. Some 17,000 people attended the opening weekend of the COPIA Center for Wine, Food and the Arts. Similarly, locations such as Monterey, Marin and Half Moon Bay bed and breakfasts saw declines immediately after September 11, but gradual recovery since. The reasons: a diversified visitor base, including large numbers of Bay Area and California visitors arriving by car; and an increased desire among tourists for shorter trips, and for natural, scenic locations away from large cities.

Still, these outlying areas also rely on San Francisco, Oakland and San Jose visitors taking day or extended weekend trips as part of a larger business trip or family visit. If San Francisco rebounds, they can expect to see significant growth.

Anecdotal evidence indicates other industry and community impacts beyond the hotel sector:

- Reports in the San Francisco Chronicle estimate that 3,000 hotel and restaurant workers – waiters, bartenders, bellhops, maids – have lost their jobs or had hours reduced to the point of losing health benefits.

- Airport bus, taxi and limousine services have laid off workers and cut back driver schedules since September.

- Child care centers in San Mateo County are cutting staff as laid off airport workers who can no longer afford child care stay home.

Local governments have also been affected:

- San Jose anticipates a 25% reduction in hotel tax collections for the fiscal year ending June 30, 2002, to $12 million – a $4 million loss in general fund revenues from the $16 million collected in fiscal 2000-01.

- Burlingame will cut in half its $9 million 2001-02 capital improvements budget as hotel tax collections have been cut in half, sales taxes are down $5 million and property transfer taxes are down $1.5 million.
• Millbrae has seen 10% of its $13 million annual budget vanish due to reduced hotel tax collections, and has cut community development, public works and parks programs.

• South San Francisco expects a $2.4 million budget shortfall – $1.4 million less in hotel taxes, and $1 million less in sales taxes – that will translate into cuts in building, street and park maintenance.

**TABLE 4**
Estimated FY 2001-02 Budget Shortfalls Due to Reduced Hotel Tax Revenues

<table>
<thead>
<tr>
<th>City</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>$48 million</td>
</tr>
<tr>
<td>Burlingame</td>
<td>7 million*</td>
</tr>
<tr>
<td>San Jose</td>
<td>4 million</td>
</tr>
<tr>
<td>San Mateo</td>
<td>3 million*</td>
</tr>
<tr>
<td>Redwood City</td>
<td>1.6 million</td>
</tr>
<tr>
<td>South San Francisco</td>
<td>1.4 million</td>
</tr>
<tr>
<td>Millbrae</td>
<td>1.3 million*</td>
</tr>
<tr>
<td>San Carlos</td>
<td>1.0 million*</td>
</tr>
<tr>
<td>Belmont</td>
<td>3-400,000*</td>
</tr>
<tr>
<td>Brisbane</td>
<td>3-400,000</td>
</tr>
</tbody>
</table>

*Aggregate Figure including sales and property transfer taxes

Sources: San Francisco Chronicle, San Mateo Times, San Jose Convention & Visitors Bureau

Economic modeling on SFO prepared by the Pennsylvania-based transportation consulting firm Martin Associates suggests that if the current decline in traffic were sustained over a year’s time, it would cost some 5,900 jobs, $237.5 million in wage and salary income, more than $3 billion in business revenues, and $36.1 million in state and local taxes directly related to airport operations. In the region’s visitor industry, a prolonged decline in traffic at the scale of current cutbacks could translate into a loss of nearly 45,000 jobs, $1 billion in personal income, $1.6 billion in business revenues and $274 million in hotel, retail sales and other taxes annually.
**TABLE 5**  
**Impact of SFO Cutbacks Due to 9/11 (Annualized)**

Assumptions: 4.5 million fewer domestic passengers per year  
600,000 fewer international passengers per year

**DIRECT AIRPORT IMPACTS**

<table>
<thead>
<tr>
<th></th>
<th>DOMESTIC</th>
<th>INTERNATIONAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOBS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>2,934</td>
<td>271</td>
<td>2,665</td>
</tr>
<tr>
<td>Induced</td>
<td>835</td>
<td>93</td>
<td>928</td>
</tr>
<tr>
<td>Indirect</td>
<td>2,008</td>
<td>268</td>
<td>2,276</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5,237</td>
<td>632</td>
<td>5,869</td>
</tr>
</tbody>
</table>

**PERSONAL INCOME ($Million)**

<table>
<thead>
<tr>
<th></th>
<th>DOMESTIC</th>
<th>INTERNATIONAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>$70.0</td>
<td>$7.5</td>
<td>$78.4</td>
</tr>
<tr>
<td>Re-Spending</td>
<td>70.7</td>
<td>7.4</td>
<td>78.1</td>
</tr>
<tr>
<td>Indirect</td>
<td>71.5</td>
<td>9.5</td>
<td>81.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$213.1</td>
<td>$24.4</td>
<td>$237.5</td>
</tr>
</tbody>
</table>

**REVENUE ($Million)**

<table>
<thead>
<tr>
<th></th>
<th>DOMESTIC</th>
<th>INTERNATIONAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2,657.0</td>
<td>$354.3</td>
<td>$3011.3</td>
</tr>
</tbody>
</table>

**TAXES ($Million)**

<table>
<thead>
<tr>
<th></th>
<th>DOMESTIC</th>
<th>INTERNATIONAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$32.2</td>
<td>$3.9</td>
<td>$36.1</td>
</tr>
</tbody>
</table>

**VISITOR SECTOR IMPACTS**

<table>
<thead>
<tr>
<th></th>
<th>DOMESTIC</th>
<th>INTERNATIONAL</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Jobs</td>
<td>32,247</td>
<td>8,267</td>
<td>44,514</td>
</tr>
<tr>
<td>Total Personal Income ($million)</td>
<td>$857.0</td>
<td>$194.4</td>
<td>$1,051</td>
</tr>
<tr>
<td>Revenue ($million)</td>
<td>$1,316.7</td>
<td>$335.4</td>
<td>$1,652</td>
</tr>
<tr>
<td>Taxes ($million)</td>
<td>$222.8</td>
<td>$50.8</td>
<td>$274</td>
</tr>
</tbody>
</table>

Source: *Martin Associates*
3. POLICY CONSIDERATIONS

The public policy response to the downturn in air travel will be affected not only by economic trends, but also by public perceptions about security and the convenience and cost of travel. A strong case can be made for simply allowing market forces to work, since hotel occupancy and retail sales numbers appear to be improving (no concrete figures are available beyond October 2001 as this report goes to press).

A recent report by the Bay Area Economic Forum, Bay Area Council and Association of Bay Area Governments, *After the Bubble: Sustaining Economic Prosperity*, shows the Bay Area positioned for growth of 4.2 - 5.1% in the next 3-5 years, well above expectations for the nation as a whole. Economic forecasts and travel industry surveys also suggest a broad consensus that the overall economy will begin to turn around in the second half of 2002, bringing travel spending along for the ride.

Short-Term Responses

While the principal focus of this report is on the importance of the air transportation and visitor sectors to the Bay Area economy, and their long-term relationship to regional airport capacity, a number of shorter-term responses have been proposed at the federal, state and local levels to address the current air travel environment. Each needs to be evaluated separately in terms of its policy implications, effectiveness, and the timing of their implementation.

**Airport Security.** Effective January 18, 2002, the federal government will require that every carry-on item, piece of baggage and freight at every airport be screened for weapons and explosives before loading on a plane. Security staffing is being increased, as are training and wages for security personnel, to meet tougher federal standards. Expensive new x-ray and visual identification scanning equipment is on order.

Congress has been considering a $1-2 billion funding package to assist airports with security upgrades, and the Bush Administration wants $6 billion in earmarked community block grants to cover an estimated 300,000 pieces of screening equipment to meet homeland security needs. But authorization is still in committee and, if passed, will be spread among 185 airports, months down the line. Absent funding assistance, airports and airlines will ultimately pass most of those costs on in higher ticket prices. Travel industry experts already expect an increase in fares as airlines consolidate and remove flights and seats from their schedules. Higher fares would likely delay recovery in the travel sector, both by reducing discretionary travel and by placing greater downward pressure on hotel rates, entertainment and other components of a trip.

As mentioned earlier, new federal rules require U.S. citizenship, high school graduation and completion of a national standardized exam for baggage screeners hired after February 2002. Screeners currently on the job will need to reapply for their jobs and meet the new requirements, as of November 2002. More than two-thirds of screeners now on the job at
SFO do not qualify under the new regulations, at a time when airport security staffing needs are about to be dramatically expanded.

In addition to allowing a year of related job experience in place of the high school graduation requirement, the Department of Transportation is looking at ways to expedite citizenship for resident screeners with a good work history who have already been in the U.S. for the requisite five years. Hiring preference is also being given to laid off airline and airport employees, at higher pay for screener positions. These policy changes are not without controversy, however: flight attendants, travel industry groups and others are questioning policies that effectively keep many of the same security workers in place at airports.

On the cargo side, airports are having greater difficulty developing dollar estimates for security costs. Technology exists to screen small parcels and uniform-size air cargo containers, for example, but it is not clear that equipment is available to screen larger and odd-sized lots such as machinery or shrink-wrapped pallets. Some highly specialized explosive detection equipment is in use, primarily by the U.S. Customs Service. But fewer than 150 of these machines are currently in operation, an estimated 2,000 will be needed by the end of 2002, and they are not in commercial production by any of the three manufacturers, which produce them. How production can be ramped up to meet federal deadlines – and at what cost – is currently a matter of discussion between airports and the Federal Aviation Administration.

Beyond the added cost, city tourism and economic development officials are concerned that airport delays from increased security – the need to arrive an hour or more earlier at the airport, stricter limits on carry-on pieces, more inspections and questioning of passengers – could become a tipping point discouraging both short-haul flights that have shown improvement up to now, and international traffic, which has yet to recover. Similarly, cargo delays that affect just-in-time supply chains or the integrity of containerized moves, will have cost impacts to businesses in high-value manufacturing.

**Broader Travel Industry.** A coalition of travel industry groups has proposed a nationwide six-point program of federal assistance beyond the airline support package:

- A $500 per individual / $1,000 per family tax credit against travel expenses;
- An expanded SBA loan program to assist small businesses not otherwise eligible for low-interest disaster relief loans;
- Travel industry job hiring, training and retention tax credits, payroll tax relief, and health insurance subsidies;
- A federally funded advertising campaign encouraging Americans to travel;
- Expand net operating loss carry-back allowances beyond the two-year limit for travel and tourism businesses for losses incurred after September 11 and through 2002; and
– Full tax deductibility for entertainment expenses, including meals now only 50% deductible.

At the state level, legislation has been proposed for a similarly structured business travel tax credit incentive for individuals and companies.

**City and County Revenue Losses.** As mentioned earlier, hotel occupancy and retail sales taxes make up a sizable portion of the budgets for a number of Bay Area cities and counties. Local governments from San Francisco south to San Jose face serious budget cuts as a direct result of the decline in tourism and business travel, and are hoping to partially offset that with restoration of state vehicle license fees. The state lowered those fees in 2000, when the budget was running a surplus, and legislation has been proposed that would raise the fees to previous levels, along with state distributions to cities and counties.

Another area where cities and counties may find themselves hard hit involves property taxes. According to a report in the San Jose Mercury News, California law allows a reassessment of property values after a “major misfortune or calamity,” whether natural or man-made, where there has been major physical damage. The State Board of Equalization is considering extending the definition to include direct September 11-related losses.

In Santa Clara County, more than 20 companies around SJC have applied for a combined $300 million reduction in assessed value, which would translate into a $3 million revenue loss, 40% of it to the county directly and 60% which the county returns to the state to fund education. In San Mateo County, United Airlines is asking for a 60% reduction in the assessed value of its properties, currently valued at $2.6 billion. That reduction would cost the county $15.6 million in property taxes.

**Long-Term Issues: Airport Infrastructure**

The Bay Area Economic Forum’s November 2000 Phase Two report detailed a $2.4 billion expansion program at SFO and a $1.4 billion program at OAK.

SFO’s plans at the time included renovation of Terminals 1 and 2; construction of a new airport hotel on city-owned property; and reconfiguration of SFO runways to double bad weather landing capacity and reduce flight delays. The runway project involves landfill into San Francisco Bay that increases runway separation from the current 750 feet to the FAA minimum standard of 4,300.

OAK has two alternative construction proposals for parallel “inboard” and “outboard” runways to increase takeoff and landing capacity – one involving bay fill and the other not. It also has planned a 5,000-space parking garage; expanded cargo facilities for FedEx and the U.S. Postal Service, as well as at the North Field; widening of taxiways; and improved ground support and aircraft provisioning facilities.
All of San Jose’s expansion plans, including two 11,000-foot runways to accommodate larger planes, have been approved and are underway. Because of SJC’s landlocked location, the airport cannot be expanded further once current projects are completed.

SFO has placed the terminal renovations and hotel construction on hold indefinitely. The airport, however, is moving forward with its proposed runway reconfiguration. While some project-related studies have been delayed, critical environmental impact studies are continuing.

OAK is moving ahead with development of the parking garage and interim parking lots, but its other projects are delayed, both due to market conditions and to a recent State Supreme Court ruling requiring more extensive noise abatement and environmental review.

Travel industry groups and local tourism promotion officials forecast a recovery in personal and business air travel beginning in the second half of 2002. Some discretionary segments of the market such as business travel may be slow to recover, however, and it remains to be seen whether they will undergo long-term structural change.

Roughly a year of half-empty flights, vacant hotel rooms, depressed restaurant and store sales, idle rental cars and taxis and quiet tourist attractions will have hurt the Bay Area badly. However, the air travel problems of 2001 are not likely to significantly alter recent projections for a doubling of regional passenger traffic (from 56.6 million to 111.1 million) and a tripling of air cargo (from 1.75 million to 5.5 million tons) in the 1998 to 2020 period. With some adjustment for timing, which may move target dates several years further out, Bay Area air traffic demand will meet those estimates.

It would be a mistake, therefore, to allow the considerable advance work required for large airport infrastructure projects, which are by definition long-term undertakings, to stop, or to assume that airports, local communities and government agencies can avoid or indefinitely delay decisions regarding the necessary investments. Nor should the region be satisfied with economic underperformance. Behind the broad economic and industry impacts already documented, is the fact the most of the recent layoffs have been felt by those who are most economically vulnerable – hourly service industry workers, many of them new immigrants with families.

The lost jobs, income, business activity and taxes in the region produced by a weak economy during 2001, and accelerated by the events of September 11, carry another important message. The recent 20-25% reduction in flight operations at SFO and SJC is comparable in its economic impact to the “demand management” scenarios outlined by the Metropolitan Transportation Commission and by an April 2001 report by Charles River Associates. In the latter report, demand on infrastructure at SFO is reduced to levels the airport can accommodate with current infrastructure (i.e., without building new runways) through a combination of technology, larger aircraft, and the capping of incoming flights. It estimates that an 18-21% reduction in flight arrivals at SFO would be needed to achieve a level of congestion relief equivalent to what would be provided by new runways. As shown by the recent drop in flights at SFO, reduced flight operations below either sustained
historical levels or projected future levels entail significant current and long-term opportunity costs. These costs have important implications for the Bay Area economy generally and the travel and tourism sector in particular.

Recent events have provided an opportunity to “see” the future losses to the Bay Area’s economy if policies are adopted that cap airport demand and allow future travel and tourism growth to go elsewhere, or that fail to adequately plan now for the investment required to accommodate future economic growth. The region must make a concerted effort to avoid compounding those losses over time.
References

The following articles, reports and research support were used in preparation of this report. Articles without bylines are staff reports; articles without page numbers are taken from web sites:

Articles


**Reports/Statistical Data**


“Impact of SFO Cutbacks Due to 9/11 Incidence.” Martin & Associates, Transportation/Economic consultants, Lancaster, PA.


PowerPoint Presentation on 2001 Traffic and Related Economic Impacts. San Francisco International Airport.
“Comparative Analysis, August-October 2001 vs. 2000.” Oakland International Airport.

“Airport Activity Comparison, September-October 2001 vs. 2000.” San Jose International Airport.


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Dan Senton/Kevin Thompson         San Jose Convention & Visitors Bureau
Manette Belliveau                 Oakland Convention & Visitors Bureau
Anne LeClaire                     San Mateo County Convention & Visitors Bureau
Daniel Howard                    Napa Valley Conference & Visitors Bureau
Rayna Lehman/Don Barker           San Mateo County Central Labor Council
John Martin                      Hotel & Restaurant Workers Union
John C. Martin                   Martin Associates