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I. INTRODUCTION

This Report summarizes an action plan for increasing air arrivals to the United States Virgin Islands. It provides the communities of St. Thomas/St. John and St. Croix with a series of actionable steps to promote their economic development through obtaining better air services. The strategies reflect the realities of 2003; an airline industry in a financial crisis and a pronounced decline in air traffic throughout the world. However, they set ambitious goals that will test the creativity and persistence of those tasked to implement them.

An air service development strategy is a key component for the development of the Islands. It will lay the foundation for an expansion of the tourism industry, and better position the Virgin Islands in competing for other economic sectors. It will also improve the Islands' quality of life through integrating them more closely with the world economy.

In the Fall of 2002, the University of the Virgin Islands, acting on behalf of the Legislature, initiated this process by requesting proposals for development of air service strategies. In February 2003, Edwards and Kelcey Inc. was engaged by the University of the Virgin Islands (UVI) with a mission to:

> **Develop a Comprehensive Air Service Marketing Strategy/Plan to increase air arrivals in the U.S. Virgin Islands.**

The original terms of reference are contained in Appendix A.

A. Why Increase Air Arrivals?

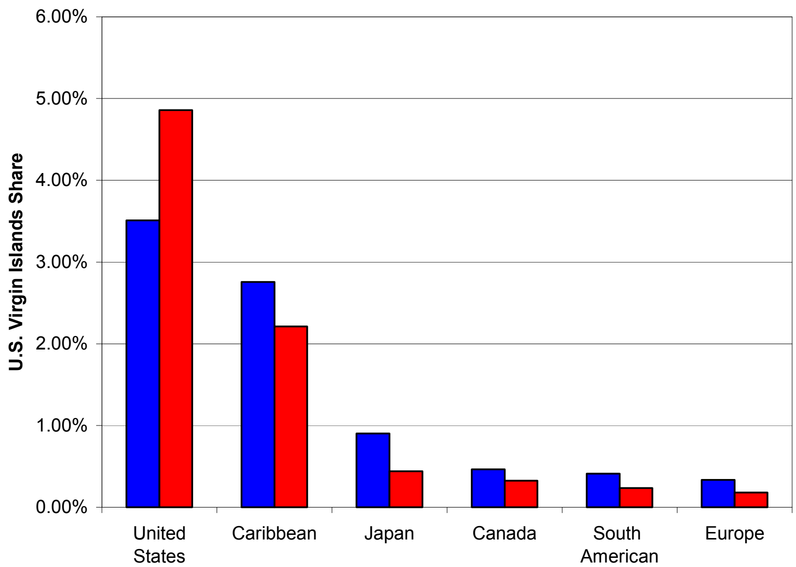
The economy of the Virgin Islands depends on a healthy tourism and travel sector. As shown in Exhibit I-1, the tourism and travel industry account for over 40% of its gross domestic product. This is a far higher portion than for the Caribbean as a whole. If this sector stagnates, the entire Virgin Islands will suffer, whatever the success of other industries.

The past decade has seen an erosion of the Islands' competitiveness as a destination. As noted in the "5 Year Plan for Fiscal Recovery"

> *in the 1990's, the U.S Virgin Islands has clearly lost significant market share relative to other Caribbean destinations … Over the 1990-97 period, the U.S. Virgin Islands air tourism market share has declined from 8.7 percent to 5.5 percent*[1]*.*

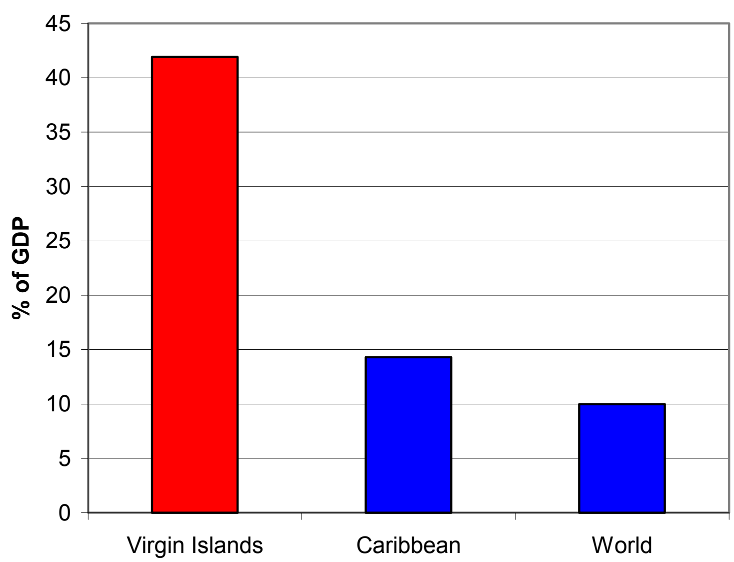
[1] United States Virgin Islands Office of Information Technology, *5 Year Plan For Fiscal Recovery* (2002)

Exhibit I-1. The Tourism and Travel Industry Share of the Gross Domestic Product



Source: The Virgin Islands, The Impact of Travel and Tourism on Jobs and the Economy, World Tourism and Travel Council

Exhibit I-2. United States Virgin Islands Share of Caribbean Tourists by Country of Residence, 1997-2001



Source: Caribbean Tourism Organization, *Caribbean Tourism Statistical Report* (2002)

As shown in Exhibit I-2, the Islands' share of all but the U.S. market has continued to deteriorate since 1997. This in no way argues for complacency. Other Caribbean destinations such as the Dominican Republic, St. Lucia, Cancun and St. Kitts are competing for U.S. travelers. Airlines have launched a plethora of new routes to serve them.

St. Thomas is the world's leading port of call for leisure cruises, and the USVI is second only to the Bahamas in terms of the number of cruise ship passengers. However, while the cruise ships certainly increase awareness of the USVI, they provide comparatively modest benefits to the economy. In 2001, the average cruise ship passenger spent only $269 per visit, while visitors arriving by air spent an average of $1,025 per visit.[2] Any attempt to promote air arrivals, and to reposition the USVI as an air destination, could have a disproportionately large positive impact on the economy.

Because of the sheer size of the tourism industry, it is necessarily the first focus of any effort to use air services as an instrument of economic development. Other industries, however, such as high technology, telecommunications and finance, are equally dependent on high quality air services. Whether the Virgin Islands goal is to enhance tourism, or develop industrial alternatives to it, high quality and attractively priced air services are a prerequisite for success.

The purpose of this document is to present and evaluate the major factors and issues critical to the formulation of an effective, successful long-term air service marketing strategy/plan. Section II outlines the approach/methodology followed in developing the plan; Section III provides an overview of the current state of the global aviation industry, and its significance to the USVI; Section IV reviews the traffic history and air service trends at St. Thomas (STT) and St. Croix (STX); Section V examines the organizational roles/responsibilities and community issues associated with the implementation of the plan; Section VI presents the airline perspectives on issues impacting future air service development in the USVI; Section VI summarizes the analysis of potential service and route opportunities; and Section VII presents a prioritized action/implementation plan.

The EK Team is indebted to countless individuals who generously donated their time, efforts and insights while meeting with us. They have helped us obtain a far better insight into the Virgin Islands than we could otherwise have obtained. Their efforts have helped us focus our recommendations and strategies to address the specific needs of both St. Thomas/St. John and St. Croix. Appendix B lists the key contributors. Appendix C provides a list of the major sources of data used in this project.

[2] Source: Caribbean Tourism Organization

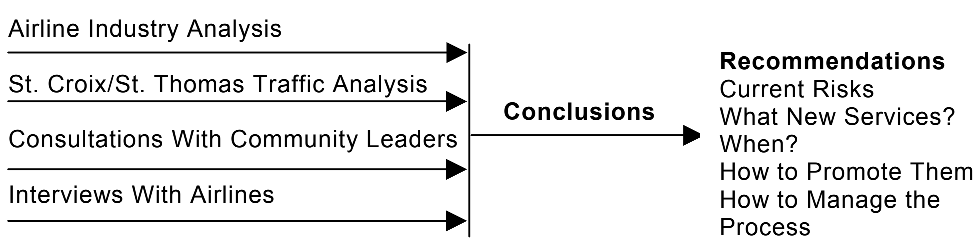
II. ASSIGNMENT APPROACH/METHODOLOGY

The recommended strategies/plan of this assignment of are based on:

- An analysis of the airline industry, its long term trends and current financial problems; specifically as they relate to their services to the Virgin Islands;
- A review of the air service and traffic patterns to and from St. Croix and St. Thomas. This considers total traffic flows, origins and destinations, capacities, load factors and fares;
- An extensive series of discussions with legislators, community leaders, business persons, hotel and resort operators on both St. Thomas/St. John and St. Croix. These meetings considered both specific community concerns about air services, and broader issues relating to the economic development, inter-island relationships, organization structure and mission, and socioeconomic background of the Virgin Islands;
- In depth discussions with the airlines to ascertain how they regard the Virgin Islands as a destination. This considers passenger loads, operating costs, airport facility concerns, operational issues and the degree to which the carriers are supported by locally based marketing efforts;
- An analysis of airline networks, traffic flows and schedules, to identify those new services having the best prospects for success;
- Integrating these findings into a series of time-based and prioritized action steps.

Exhibit II-1 depicts this process schematically.

Exhibit II-1. Assignment Approach/Methodology



A plan to increase air arrivals to the Virgin Islands will succeed only if it creates a genuine partnership between the community and the airlines. The airline industry in 2003 is under severe financial hardship. While the problems will affect the timing of every step of the strategy, they should not distract the Virgin Islands from the overall goal of increasing air arrivals. Rather, they only impart an added sense of urgency to the recommended measures, and provide the Virgin Islands with opportunities to excel in a difficult environment. The next section examines the fi\undamentals of the airline industry, and how they affect the Virgin Islands.

III. AIRLINE INDUSTRY TRENDS AND THEIR IMPORTANCE TO THE VIRGIN ISLANDS

A. Introduction

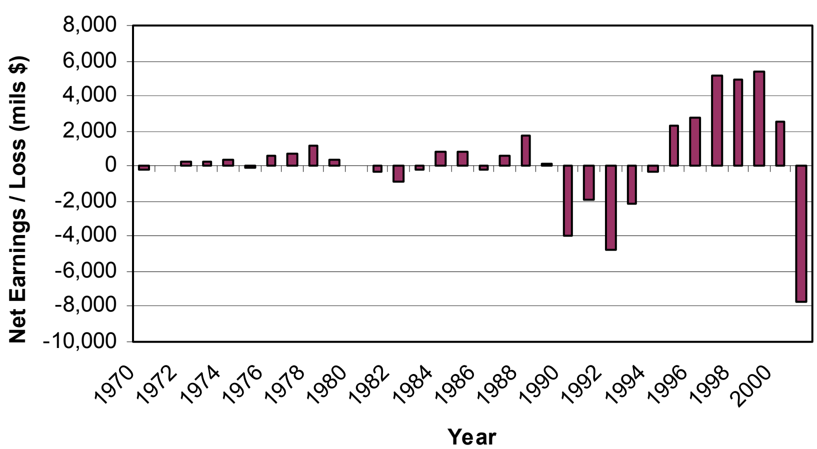
A successful program for increasing air arrivals to the Virgin Islands will have two major components. One component addresses the intrinsic attractiveness of the Islands as an airline market. It considers what factors draw airborne visitors to the Islands and how effectively these assets are communicated to prospective markets. The other part considers the supply of scheduled airline capacity. It identifies the key destinations and carriers, and considers the minutiae of aircraft scheduling and pricing. The two components, working together in harmony, will ensure that the Islands' supply and demand for air travel grow together.

This section assesses the issues facing the airline industry, both in the broadest sense and in their implications for St. Thomas and St. Croix. The objective is to look beyond the current crisis in the airline industry, to identify the key factors of importance to the Virgin Islands. This will serve as the point of departure for a detailed analysis of the Virgin Islands' air market, to be discussed in Section IV.

B. The Current Crisis in the Airline Industry

In the Spring of 2003, the airline industry faces a crisis without precedent. While the industry has always been very cyclical, with severe losses corresponding to economic downturns, the severity of current problems have jeopardized the survival of even the best managed companies. In 2002, the U.S. industry lost more than $1 million every hour. Exhibit III-1 outlines the net revenue / loss of domestic airlines from 1970 – 2003.

Exhibit III-1. Net Earnings/Loss of Domestic Air Carriers



Source: Air Transport Association

Total annual losses exceeded the cumulative profits of the last 45 years. United Airlines is in the midst of a Chapter 11 bankruptcy, and could fail altogether. US Airways only recently emerged from bankruptcy, but continues to operate at a loss. American Airlines, the largest carrier in the Islands, remains at grave risk. Other airlines serving the Islands, such as Continental and Delta, continue to generate huge operating losses. The investment community has rated the debt of every airline except Southwest as junk status. Average debt loads exceed 90% of capital value.

Multiple factors account for this crisis:

- The 9-11 terrorist attacks on New York and Washington have increased traveler anxiety and have reduced the desire to travel by air;
- Upgraded security procedures, including tougher inspections and longer lineups, have further contributed to the reluctance to travel;
- The Iraq War has further exacerbated traveler anxiety. In the weeks immediately preceding the war, some airlines received more cancellations than reservations on international flights;
- Continuing problems in the Middle East have led to very volatile fuel prices. While some carriers have wholly or partially hedged their fuel costs, many airlines remain vulnerable to higher prices;
- The national economy has still not fully recovered from the recession, initially induced by excessive inventory levels and asset valuations of late 2000 in the technology sector. Strong consumer spending has kept the recession very mild for many sectors; however the economic weaknesses have proven unusually persistent;
- The increased use of Internet websites for booking flights has made airline fare structures largely transparent. Passengers can readily shop for the lowest fares. Airlines are forced to compete increasingly on the basis of fares. The new distribution channels have undermined the effectiveness of traditional yield management techniques[3];
- The weak economy has particularly affected the demand for business travel. Business travelers usually pay higher fares, and generate a disproportionate share of airline profits. United and American have traditionally served mostly business travelers, and have therefore been particularly harmed by the decline in corporate travel;
- Many airline costs are largely fixed in the 5-6 month term through the design of the schedule. Other costs are stipulated in collective agreement contracts, and can only be reduced by a lengthy process of negotiation. These factors make it difficult for airlines to reduce costs in the face of a shrinkage of demand. Between 1990 and 2001, the best year for the world airline industry was 1997, with a 2.9% net margin on revenues[4]. Between 2000 and 2002, U.S. industry

[3] "Yield management" refers to a range of techniques airlines use to manage their seat inventories. Airlines develop a wide range of fares for any city-pair, which vary according to purchase price, length of stay, advance purchase requirements and other factors. They then assign a certain number of seats on each flight to every fare class, based on historical patterns and advance bookings. These assignments are reviewed and revised daily. The objective is to obtain the largest revenue possible from each flight.

[4] Source: International Civil Aviation Organization Air Transport Reporting Form EF-1, International Civil Aviation Organization, Montreal PQ

revenues fell by fully 24%[5]. Such a precipitous drop in a highly leveraged industry makes huge financial losses inevitable, regardless of the pace of cost reduction;
- The inherent nature of airline competition. On most routes, market shares are highly concentrated, and airlines behave as oligopolies[6]. Even with declining traffic, airlines are reluctant to withdraw capacity and cede market share, and profits, to competitors. This slows the process of cost cutting and assures all carriers on a route of insufficient traffic. This factor has made the airline industry chronically less productive, and has exacerbated the recent downturn.

Carriers facing short-term cash problems cannot afford the lengthy and risky process of market development. New routes usually require initial investments in opening new stations, and often involve a lengthy period before they become profitable. Furthermore, weak traffic levels mean that an airport recruiting new carriers may place its current operators at risk.

The crisis also places existing services under pressure. Virtually every U.S. airport has lost scheduled services and traffic. Between 2000 and 2002, St. Thomas lost 3.32%% of its passengers and St. Croix 12.51%[7]. Economic pressures have forced airlines to discontinue many services that were once profitable. They must be particularly careful in controlling operating costs, through measures such as disposing of elderly and inefficient aircraft, seeking wage rollbacks from unions, deploying smaller equipment, making greater use of subcontracted handling at low volume stations, and eliminating staff and operating redundancies. The airlines have been forced to be particularly aggressive in countering any measures that might increase their costs such as increased airport fees.

Significance to the Virgin Islands

The industry crisis has important implications for the Virgin Islands and for the goal of increasing air arrivals. On the surface, a failing airline industry poses a severe obstacle to any air services development strategies for St. Thomas or St. Croix. However, the current problems have only increased airlines' needs for profitable routes. The airlines have been forced to shift their attention from their unprofitable current routes to opportunities they may have overlooked previously. The Virgin Islands have not been high profile destinations in the past, but could prove of growing interest.

The reduction in scheduled operations has left many airlines with surplus capacity. They can now consider inaugurating flights that were once precluded for lack of available aircraft. Routes devoted to leisure traffic, such as to the Caribbean, could benefit. Many destinations in the region cannot support daily services, but weekend-only flights could provide valuable links for vacationers. Before 2001, most airlines

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[5] Source: Air Transport Association, "U.S. Airlines: The Road to Resuscitation", Washington, January 2003
[6] In oligopolistic markets, producers base their output decisions partly on the actions of their competitors. Airline oligopolies sometimes attempt to out-schedule their rivals or "bracket" their flights. The resulting capacities may have only a distant relationship to underlying demands. This behavior, while less prevalent after airline deregulation, continues even in a severe industry contraction. It impedes an adjustment of capacities and costs to lowered traffic.
[7] Source: Virgin Islands Port Authority

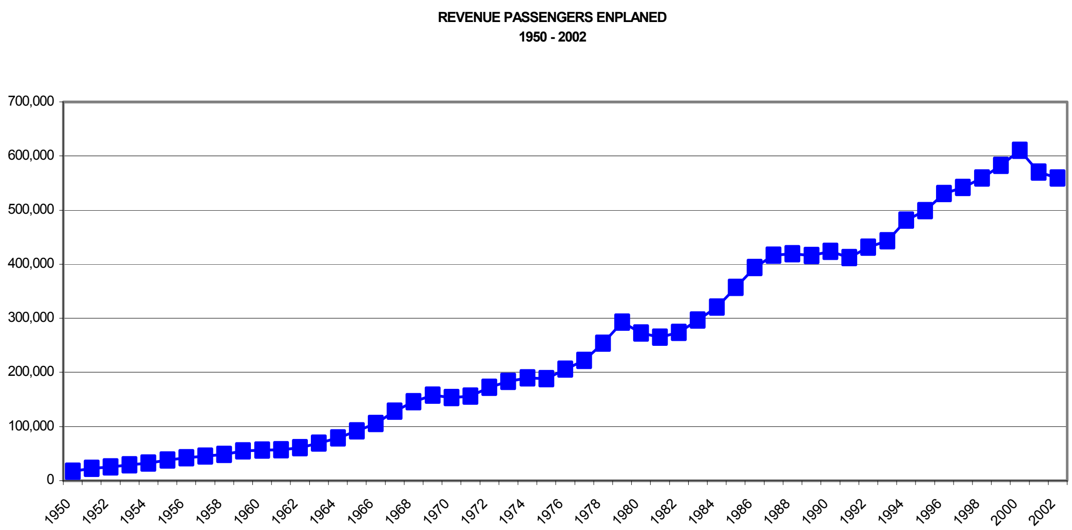
were reluctant to serve any route unable to support at least daily, or multiple-daily departures throughout the year. Now, such low frequency routes, using aircraft deployed during weekdays to business-oriented routes, because an attractive source of revenue. The Virgin Islands could therefore seek more weekend-only or seasonal routes, such as United Airlines' winter-only flights to Chicago and Washington.

Airlines traditionally have been supported by business travelers paying premium fares, and have therefore been most aggressive in serving large business travel markets. As a primarily leisure destination, the Virgin Islands has received correspondingly less attention. However, the weak economy has been particularly detrimental to the business market. Many corporations have curbed business travel, while obtaining large discounts from the airlines. The Internet, by simplifying fare searches, has made the airline industry much more price-competitive, and has significantly eroded the difference between business and leisure fares. Carriers dependent on high fare business travel, particularly United and American, have suffered particularly in the industry contraction. The fares and traffic volumes for leisure travel have been less affected than business markets. This has made St. Thomas and St. Croix relatively more attractive as destinations for the airlines.

However, the current situation offers several threats to the current availability of services. Most carriers serving mainland-Virgin Islands routes offer limited frequencies. Notwithstanding the shift to seasonal or weekend-only services, the airlines will still consider if current frequencies can justify their costs of maintaining stations in the Islands. Some carriers have served the Virgin Islands in conjunction with Puerto Rico, or St. Croix as part of a circuit that includes St. Thomas. These short flight legs are very expensive, since many operating costs depend on the number of takeoffs rather than the hours flown. Fuel costs are particularly onerous for short flights by large jets. These factors could affect such services as US Airways' Philadelphia-St. Thomas-St. Croix-Philadelphia route; to the detriment of either St. Thomas or St. Croix. It was likely a factor in American Eagle's decision to discontinue serving the St. Thomas-St. Croix sector.

The short-term problems affecting the airline industry may distract both airlines and communities from longer-term opportunities. As illustrated in Exhibit III-2. Revenue Passenger Enplanements, 1950-2, the recent industry decline is a truly exceptional period; a modest decline after several decades of rapid growth.

Exhibit III-2. Revenue Passenger Enplanements, 1950-2002



Source: Air Transport Association

Between 1950 and 2000, U.S. domestic traffic grew at a compounded annual rate of 8.3%[8]. The 6.4% drop from 2000 to 2002 merely returns traffic to the 1998 level. The earnings crisis, by weakening airline balance sheets, will harm their access to capital to support growth for years to come. However, the current restructuring, a stronger economy, and the recovery of traffic after the conclusion of the war in Iraq, should provide a firm basis for a more expansion-oriented airline industry. The Virgin Islands could benefit as a leisure-oriented destination, combining the exotic ambience of the Caribbean with the security of the United States.

C. Increased Economic Pressures on Airports

Declining revenues and the increasing importance of price competition have placed airlines under intense pressure to reduce costs. The airlines in turn have been seeking relief from their suppliers. For example, through eliminating many travel agent commissions, the airlines succeeded in shrinking these expenses from 10.% of revenues in 1993 to 3.5% in 2001[9].

The airlines have also targeted airport fees. In May 2003, US Airways CEO David Siegel stated that airport costs “are part of the next wave of aviation industry restructuring.” Targeting the Pittsburgh hub, he also stated that its high level of debt and high interest payments makes it “an uncompetitive place to do business.” Southwest Airlines has publicly stated that it will not serve Denver, because of the

[8] Source: Air Transport Association
[9] Source: Air Transport Association, 2003

costs of the new airport. It places all the stations it serves under continual pressures to maintain low operating costs.
As an absolute minimum, the problems with the industry severely reduce the airports' limited pricing flexibility. The airports face higher costs because of a greater security awareness. Furthermore, the recent decline in traffic has reduced their revenues. Most airports operate on a non-profit basis, and price their services only to recover costs. Their costs; bond servicing, administration and maintenance, are largely independent of traffic. They spread their costs over the current amount of traffic, making up any shortfall from their signatory carriers. To remain solvent and avoid a default on their bonds, they are under immediate pressure to match any traffic decrease with increased rates. They risk a vicious circle, in which traffic declines force them to raise rates, causing further airline cutbacks and a further round of rate increases. This can have a very negative impact on the perceptions and actions of cost-conscious airlines. To minimize the risks of such a spiral, they must keep costs to a minimum from the outset.

Some airports have used user fees as a marketing tool. Many, including the Virgin Islands Port Authority, grant a temporary holiday on landing fees to recent entrants. The Puerto Rico Ports Authority has reduced its landing fees by 25%. Hub carrier American's reduction is based on its load factors, with a maximum discount of 25%. In 2002, these landing fee discounts cost the Authority $5.8 million[10].

There are no simple answers of how airports should react to an unprofitable airline industry. Both the airlines and the airports are under an intense financial squeeze. Airports must trade off their own financial viability against the risk of alienating their tenant airlines.

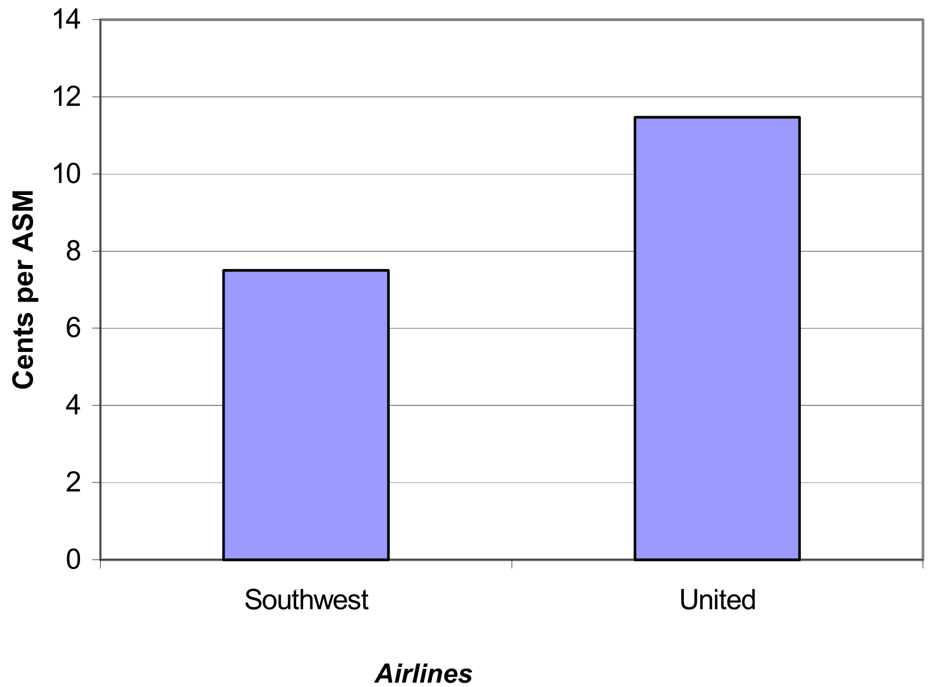
D. Emergence of Low Fare Airlines

One of the most important trends affecting the airline industry has been the emergence of low fare airlines. These airlines first appeared in intra-California routes in the 1960's, but expanded throughout the nation after the national deregulation of 1978. The largest and most successful operator, Southwest Airlines, was founded in 1971 and served high-density routes within Texas.

The low fare airlines use a range of business approaches. Southwest flies on mostly short haul, high-density services, but is increasingly active on transcontinental sectors. AirTran and Frontier fly hub-and-spoke routes, while Jet Blue offers long distance point-to-point services. The airlines uniformly share a tight control of costs, simplified fleets, flexible work rules that promote efficiency, an emphasis on under-served markets or airports and simplified fare structures. Exhibit III-3 illustrates the cost advantages of a carrier like Southwest when compared to a network carrier (United Airlines).

[10] Source: Puerto Rico Herald, May 12, 2003

Exhibit III-3: Operating Expense per Available Seat Mile, Southwest and United



Source: Quarterly Financial Reports Southwest Airlines and United Airlines April 2003

Most importantly, the low fare airlines did not inherit the wage scales, employee attitudes and corporate culture of a protected industry, in which the government, through the Civil Aeronautics Board, insulated the industry from excessive competition. The low fare carriers have therefore been more opportunistic and adaptable than the legacy airlines. Low fare airlines have had a major impact on traffic. The combination of their own services, lower fares, and the competitive response of incumbents has often led to large traffic increases[11].

Low fare carriers such as AirTran, JetBlue and Southwest have been more profitable than the traditional airlines, particularly in the current industry downturn. However, low fare airlines are not inherently more profitable (or less unprofitable) than the airline industry as a group. Since airline deregulation in 1978, many firms have attempted to establish low fare air services. Most had insufficient capital, and were unable to survive aggressive competitive responses by the established airlines. Recent new entrant failures include Vanguard, Access Air, Legend, National and ProAir. The three profitable low fare airlines are the exceptions to the poor financial performance of most new and low fare carriers.

[11] See “The Low-Cost Airline Service Revolution”, Federal Aviation Administration, United States Department of Transportation (Washington, 1996)

By the end of 2002, the low fare airlines served 20% of the domestic market, but influenced fares on a much larger share. The traditional airlines have attempted to emulate their advantages, with mixed success[12]. Some have attempted to launch separate low fare divisions, such as Delta's "Song" and US Airways' discontinued "MetroJet."

Significance to the Virgin Islands

The low fare carriers have had limited importance to the Virgin Islands[13]. They have focused on high-density mainline services. They usually require high volume stations in order to spread their fixed ground costs over a sufficiently large number of flights. Some seek a minimum of ten daily departures. Almost no communities generating traffic comparable to St. Thomas or St. Croix have low fare airline services. Those that do were required to commit to large financial incentives. Most low fare airlines operate simplified fleets, and will not necessarily own the aircraft appropriate to flying Virgin Islands-U.S. mainland routes. Finally, the low fare airlines have many opportunities within the continental United States, and see no need to diversify into new areas. They are thus very unlikely to operate seasonal or services or routes with less than a daily frequency.

Nevertheless, several factors suggest low fare carriers could be of both direct and indirect importance in the quest to increase air arrivals at the St. Thomas and St. Croix airports:

- In 2002, JetBlue inaugurated services to San Juan. This does not necessarily indicate a company initiative to expand into the Caribbean. The New York-San Juan route, with over 8 times the traffic of the St. Thomas-New York market, is an ideal market for JetBlue. It would still be appropriate to view JetBlue as a long term (3-4 years) candidate for service to the Virgin Islands.
- JetBlue does not enter into formal agreements with other airlines to exchange traffic. Passengers connecting to JetBlue from other airlines must purchase separate tickets. For passengers traveling to and from the Virgin Islands on short notice, and required to purchase full fare economy tickets, an itinerary via JetBlue and a commuter carrier on the San Juan-St. Thomas/St. Croix leg is financially attractive. The DOT's origin-destination statistics, available to all airlines, will report this JetBlue traffic as a San Juan origin or destination; the link with the Virgin Islands will fail to be captured. The statistics will therefore understate long haul traffic to and from St. Thomas and St. Croix. As JetBlue expands at San Juan, this anomaly will be a growing problem.
- As the low fare carriers exhaust expansion opportunities on the U.S. mainland, they will increasingly seek opportunities in the Caribbean, Mexico and Canada. This will become increasingly important by about 2007.
- Despite their efforts at emulation, the traditional airlines have been unable to replicate fully the low costs and commercial vitality of the low fare airlines. They continue to surrender traffic to the low fare airlines, and increasingly avoid markets where they face strong competition from this segment. The number of

[12] In late 2002, American Airlines announced a fleet rationalization program that would great simplify its maintenance and flight crew training/scheduling. It also "depeaked" its Chicago and Dallas/Fort Worth hubs by adjusting its schedules, thereby greatly reducing aircraft downtime.
[13] American TransAir, an exception, has operated charter services to the Virgin Islands. It could be considered a candidate for scheduled flights.

routes where they do not face low fare competition continues to fall. Having no low fare airline services at the Virgin Islands would therefore be a strong inducement for more capacity by the traditional airlines.

- To the extent that they can lower their operating costs, the traditional airlines will be more profitable and better able to compete. They will be stronger candidates to increase services to the Virgin Islands and elsewhere. Delta has been particularly successful in reducing its costs, and expects to have implemented a further 15% reduction by 2005.

E. Airline Consolidation

The years following deregulation saw a massive consolidation of the industry. Airlines such as Piedmont, Ozark, Southern, North Central and National were acquired by larger airlines. Braniff, Eastern and Pan American failed, and the remaining airlines quickly filled any service gaps.

Recent merger activity has been limited. In 1999, American Airlines acquired Reno Air, and purchased Trans World Airlines in 2001. United Airlines attempt to acquire US Airways was rejected by the Justice Department in August 2001. The Department of Justice and the Department of Transportation seek to maintain competition, and have been very aggressive in scrutinizing proposals and imposing side conditions. Airline executives have claimed that constraints on the proposed Continental/Northwest/Delta alliance would negate any benefits. The lengthy regulatory process and the small likelihood of obtaining approval have likely deterred many proposed combinations.

A further wave of airline mergers could only succeed if regulators become more receptive. The desperately poor financial condition of many airlines and the prospect of outright failures of leading carriers may encourage greater leniency. If so, additional mergers are likely to take place, reducing the number of network carriers from the current seven to three or four. While the specific transactions are a matter of speculation, the mergers would likely involve each of the “big three”, United, American and Delta, acquiring Northwest, US Airways, Continental and America West.

Significance to the Virgin Islands

Any renewed merger activity would almost certainly involve airlines serving St. Thomas and St. Croix. It could lead at the outset to fewer services. However, the largest operators in the Virgin Islands, American, US Airways and Delta, are very unlikely partners. In the longer term, as the newly merged entities rationalize their networks, a series of larger and stronger hubs will likely result. For example, a Northwest-Continental merger could strengthen both Detroit and Houston, potentially allowing new services to St. Thomas and St. Croix. While a more concentrated industry is likely to boost fares, the tradeoff, airlines sufficiently profitable to obtain access to capital markets, would help assure consistent access to the Islands in the long run. A new wave of mergers, while posing immediate risks of service losses, would be to the long-term benefit of the Virgin Islands.

F. Industry Maturity

The rapid growth of commercial aviation is the result of national economic expansion and falling airfares. Exhibit III-4 illustrates that between 1970 and 2001, the average per-mile fare in 1978 dollars fell from $.0973 to $.0457[14]. During the same period, total traffic, as measured by revenue passenger-miles, expanded nearly five-fold[15]. The national economy, as measured by real gross domestic product, grew by 165%[16].

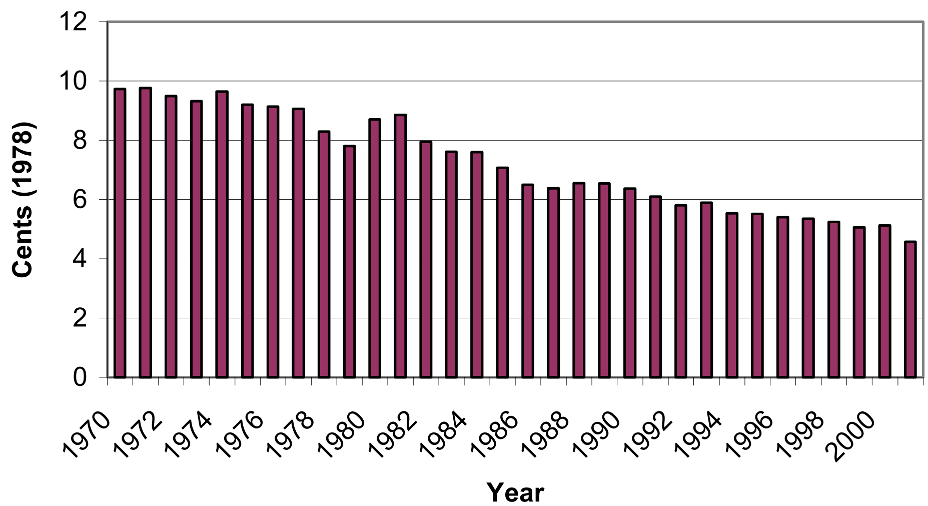


Exhibit III-4: Average Fares per Mile (1978 dollars)
Source: Air Transport Association

The airline industry owes most of its growth to continually falling fares. Improved technologies have resulted in greater fuel efficiency, lower maintenance costs and two-person cockpit crews. Deregulation, through creating a competitive market, has forced carriers to pass these savings on to the traveling public in the form of lower fares.

The process of falling fares cannot continue indefinitely. Higher fares will be necessary to restore industry profitability. With every cost-saving innovation, it becomes more difficult for the manufacturers to squeeze out further productivity improvements. For example, while the industry has largely made a full transition from 3 to 2-person pilot crews, there is no process in motion to cut crews to 1 person. There are “hard” theoretical limits to fuel efficiency. These factors mean that costs, and fares, will eventually approach a plateau. Since it is not low fares per se, but *falling fares* that generate growth, this means that the long-term expansion of the

[14] Source: Air Transport Association and United States Department of Transportation Form 41 Report
[15] Ibid
[16] Source: Bureau of Economic Analysis

airline industry must eventually slow. During this decade, growth rates of 2-3% will likely prevail in an industry that still expects a 5-7% annual growth. While a rebound from current industry difficulties may cause a large one-time increase, long-term expansion will continue at more modest rates than the past.

Significance to the Virgin Islands

Communities should adopt more conservative expectations of traffic and air services growth at their airports. The airline industry will become less expansion-oriented, and less willing to invest in new aircraft to launch additional services. Proposals for new services will receive heightened scrutiny by airline planners. The slower growth will make it considerably more difficult to launch new airlines, since fewer underserved market segments are likely to appear, and incumbents will be more aggressive in defending their current revenue sources.

A major finding of this Study is that the Virgin Islands do not have an immediate and pressing shortage of raw airline capacity. Rather, current schedules are already commensurate with traffic demands, and the major air service issues involve fares and tourism promotion. The recommended strategies address these issues in order to expand demand. Carriers would then respond with increased capacity. With a mature industry offering fewer opportunities elsewhere, measures to increase the underlying traffic base at St. Thomas and St. Croix will make the Virgin Islands of particular interest to the airlines.

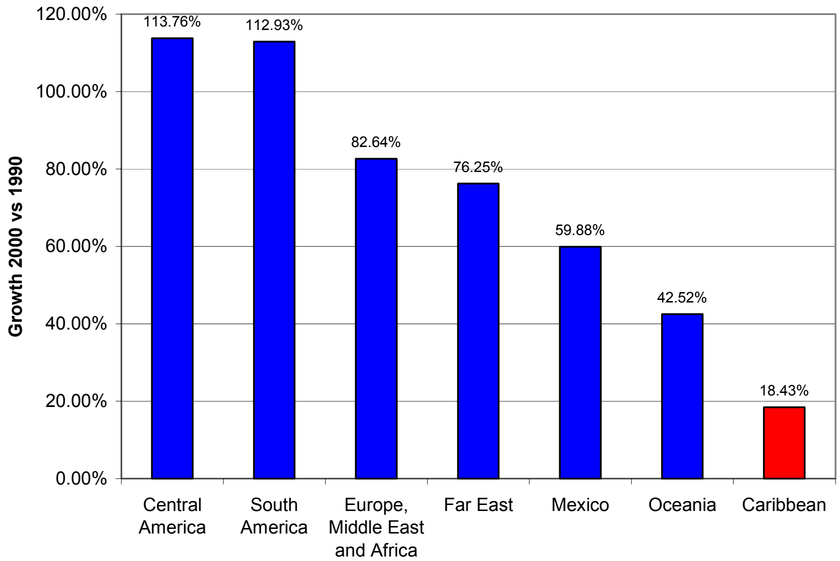
G. Air Traffic Growth in the Caribbean

In the last decade, traffic between the United States and the Caribbean grew slowly. Exhibit III-5 shows growth rates for the number of scheduled and charter passengers. Caribbean traffic expanded only 18.4% through the decade, for a compounded annual increase of 1.7%.

Several factors accounted for this weak performance:

- Every other market saw a significant liberalization of air service agreements, allowing market forces to operate in what were once very restrictive regimes;
- Major geopolitical events, such as the collapse of communism, economic liberalization in China, the growth of liberal economies in the Far East and the North American Free Trade Agreement have affected other areas;
- Political reform and economic stability in certain destination countries, particularly Central America;
- Economic integration and global rationalization of production processes. This has stimulated traffic to large producing and consuming areas such as Europe, South America and the Far East;
- A limited interest by U.S. carriers in the Caribbean; and
- A growing U.S. taste for more “exotic” and distant vacation destinations, aided by a strong dollar.

Exhibit III-5. International Traffic Growth, 1990-2000

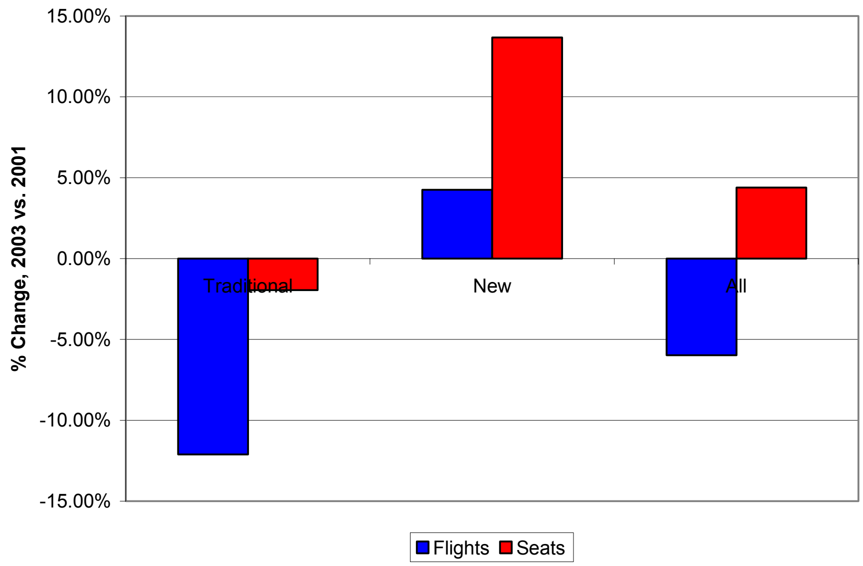


Source: United States Department of Commerce "International Air Travel Statistics for U.S. Airports"

Since 2001, the Caribbean has seen renewed interest. Exhibit III-6 shows changes in U.S.-Caribbean airline capacity for January 2001 and January 2003. The graph distinguishes between the perennially popular high volume destinations of Bermuda, Nassau, Freeport, Montego Bay and San Juan, and those that have been less visited. The established destinations shared the industry-wide contraction prompted by the 9-11 attacks, losing 12.1% of their flights and 2.0% of their seats. However, flight frequencies to the other destinations grew by 4.3% and seat capacities grew by 13.7%. Flights to the Caribbean overall fell by 6.0%, but seat capacities expanded by 4.4%. The expansion included nonstop services from Memphis to Montego Bay and Philadelphia-St. Lucia.

US Airways has been particularly active in the region. New services include Philadelphia-St. Kitts, Pittsburgh-Montego Bay and the Saturday-only Charlotte-St. Croix route. It has a strong position in the eastern United States, where much of the Caribbean traffic originates. The Charlotte hub has proven particularly effective for routing traffic between the mainland and the Caribbean. Its January 2003 schedule offered a 18.0% increase in flights and a 40.8% increase in seat capacity to the Caribbean over that of January 2001. Its share of U.S.-Caribbean capacity increased from 6.9% to 9.3%. During the 2001-2003 period, US Airways was in a financial crisis, and was forced to make large capacity reductions on its domestic network.

Exhibit III-6. Airline Capacity Growth in the Caribbean, 2001-2003
Source: Official Airline Guide



Significance to the Virgin Islands

The growth of services to the Caribbean could create opportunities for the Virgin Islands. As more carriers become familiar with the region, they will view any new services as less risky. Northwest, the largest network airline not serving the Virgin Islands, has become a stronger presence in the Caribbean, and opening routes to the Virgin Islands would now constitute a less radical step for its planners.

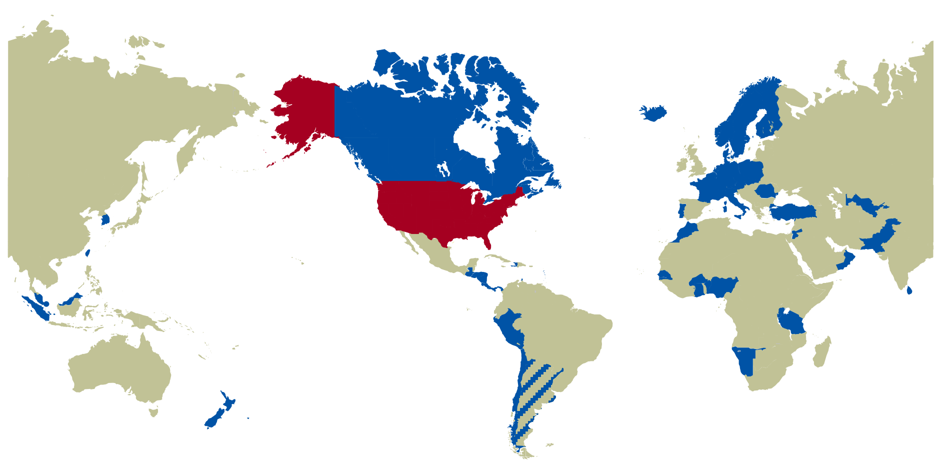
Should the recent capacity growth in the region be a harbinger to a widespread shift in passenger preferences, the Virgin Islands could see a rapid growth in popularity as a destination. To do so, it would have to differentiate itself as offering a distinct set of attributes and advantages over other destinations. An expanding market of Caribbean visitors does not necessarily pose a benefit to the Virgin Islands. They will face a growing array of competitors, and if they cannot position themselves in appealing manner they will run the danger of being overlooked in the expansion. Thus the issues of promoting St. Thomas/St. John and St. Croix are of key importance to any effort to expand air arrivals.

H. International Airline Liberalization

The U.S. deregulation of domestic travel in 1978 has fostered far-reaching, and still incomplete, changes to the airline industry. The airlines restructured their networks into hub-and-spoke systems. Through a careful selection of hubs throughout the nation, each airline could offer virtually anywhere-to-anywhere travel with high frequencies and no more than two enroute stops. Most importantly, these systems eliminated the need to interchange traffic and share revenues market power to rivals. Airports in the Virgin Islands are now spokes to Miami, San Juan, Atlanta, Charlotte and other hubs. This process also involved a wave of airline consolidations, and the development of small aircraft networks to feed traffic to hubs. Freedom of entry also allowed low fare airlines to initiate services; most efforts have failed, but the few successes have greatly intensified price competition. Better services, low costs and lower prices have led to a rapid increase in traffic.

The success of domestic deregulation has prompted policy makers in many countries to seek similar benefits for international services. However, the process has been much slower. International air services are governed by a set of agreements between governments. Two countries wishing to establish an air service connection negotiate an agreement stipulating the terms under which such links will operate; how many airlines from each country could operate the service, points they could serve, capacities each could offer and how they will establish prices. The "bilateral air service agreements" vary widely. Most older agreements are very strict, and specify in painstaking detail what is permissible; everything else being forbidden. The United States has consistently sought to liberalize such agreements; an "open skies" bilateral creates almost a free market between the participating companies. The United States has signed such agreements with over 50 countries, including Chile, the nations of Central America, Aruba, Jamaica (this has not been ratified by Jamaica) and most nations of western Europe (Exhibit III-7). These agreements would allow both foreign and U.S. carriers to initiate international flights to and from the Virgin Islands. Bilateral agreements with most nations in the eastern Caribbean remain somewhat restrictive.

Exhibit III-7. Map of Liberalized World



The next step in liberalization is to establish a multi-country common market for aviation, whose members ultimately would conclude collective agreements with non-member nations. The European Union is well advanced in this process, and similar initiatives are underway in Southeast Asia, South America, Africa and the Middle East. The CARICOM Multilateral Air Services Agreement, negotiated among the 14 member states, entered into force in 1998. It allows airlines owned and controlled by nations of CARICOM free entry to intra-CARICOM routes. The CARICOM nations have long allowed airlines from other member states to operate international services on their behalf. For example, BWIA has been designated by the Government of Barbados to operate Barbados-London flights. The multilateral agreement is being broadened to include members of the Association of Caribbean States ACS). This latter group includes 26 Caribbean island and coastal nations, but excludes the United States. The new agreement would allow the virtually unrestricted expansion of flights within the Caribbean basin by member states.

The liberalization process works most effectively if airlines have been privatized. In 1994, Air Jamaica was privatized, followed by British West Indian Airlines in 1995 and LIAT in 1996. Air Jamaica has subsequently developed Montego Bay as a hub for much of the eastern and central Caribbean. It has also boosted services to the United States and Belize. Airline privatization often sparks a process of consolidation. In early 2002, LIAT and BWIA negotiated a strategic alliance under which they would exchange traffic. The closer working relationship has resulted in plans for a full merger of the two entities. The newly merged airline will likely integrate the intra-Caribbean services previously operated by LIAT with BWIA's long haul flights. It will create new options for people traveling from Europe and the United States to the Caribbean.

Significance to the Virgin Islands

St. Thomas and St. Croix have both benefited from U.S. deregulation. Any U.S. airline fit, willing and able can inaugurate domestic services. Deregulation has allowed carriers such as US Airways and Delta to serve the Virgin Islands; both through granting them legal authority and for encouraging them to make the network refinements needed for such flights to be profitable. However, deregulation has reinforced American's San Juan hub, which competes with direct services to the mainland. While routings via San Juan may be somewhat time-consuming and involve less popular turboprop aircraft, this alternative offers reasonably direct one-stop services to a very wide selection of mainland cities.

Although the United States has not liberalized many of its bilateral agreements with Caribbean nations, U.S. carriers usually have few impediments beginning services. This has placed St. Croix and St. Thomas in intense competition with St. Kitts, Barbados, Antigua and other islands for airline resources. Signatory states to the ACS liberalization will have an advantage in obtaining direct intra-Caribbean air services. However, the current regime of bilaterals could support efforts to develop either the St. Croix or St. Thomas airports as intra-Caribbean hubs.

The most important regulatory constraint for the Virgin Islands is the bilateral with the United Kingdom. Negotiations have long been stalemated over the issue of increased access to London's Heathrow Airport. The current regime therefore precludes any major expansion of service to London's Heathrow or Gatwick airports, although carriers have free access to other airports in the U.K. In the long term, the U.K. could be an important market for the Virgin Islands. The islands have received a few limited charter services, although a scheduled service, likely in conjunction with another Caribbean island, might be feasible. Such a service, at least from the two premier London airports, would be ruled out by the current imbroglio. Other Caribbean islands face no such constraint, and have recently obtained expanded services to the United Kingdom. The LIAT-BWIA merger could assist St. Thomas/St.

John and St. Croix in developing European and Canadian markets more effectively. It will have no effect on services to the United States. As a non-U.S. legal entity, the airline will be strictly barred from serving intra-U.S. traffic.

I. Summary and Conclusions

This Section has examined the key trends facing the commercial airline industry and their importance to the objective of increasing air arrivals at St. Croix and St. Thomas:

- The current crisis in the airline industry
- Increased economic pressures on airports
- The growth of low fare airlines
- Airline consolidation
- Industry maturity
- Air traffic growth in the Caribbean
- International airline liberalization

The discussion has shown how each trend is a two-edged sword, offering both opportunities and risks to the Virgin Islands. None of the trends suggests that the current industry environment makes marketing efforts futile. Nor do they imply that the Islands are likely to obtain a large capacity increase in the immediate or distant future. Efforts to market the Islands directly to prospective carriers, with sophisticated presentations and route evaluations, while potentially useful, are neither sufficient nor even the most important part of the process of increasing air arrivals. Rather, the industry considerations uniformly indicate that an effective strategy should be locally based, and should address two core elements:

1) The manner in which the Virgin Islands are promoted to prospective visitors
2) The airline economics of serving the Islands; specifically user charges at the Cyril E. King and Henry E. Rohlsen Airports.

Later Sections will address these issues and effective strategies in greater depth.

The next Section will consider air services at St. Thomas and St. Croix in greater depth. It will provide a detailed description of air services, traffic and fares at both airports, and their relationship to the goal of increasing air arrivals to the Virgin Islands.

IV. HISTORICAL TRAFFIC GROWTH AT THE ST. CROIX AND ST. THOMAS AIRPORTS

A. Introduction

The first step in a program to increase air arrivals at St. Thomas and St. Croix is to quantify existing and recent historical levels of traffic. This analysis, through identifying long term trends and persistent patterns in the Islands' travel market, will serve as the point of departure for preparing air arrivals strategies.

This Section addresses the following:

- Recent air traffic trends at the Cyril E. King and Henry E. Rohlsen Airports;
- Load factors of scheduled air services to and from the Islands;
- The origins and destinations of all travelers to the U.S. Virgin Islands;
- International traffic;
- Connecting traffic at the two airports;
- Air fares to and from the Virgin Islands, both in relationship to points in the continental United States and between the U.S. and competing destinations in the Caribbean; and
- The impact of the 2001 terrorist attacks on traffic at the two airports.

B. How Air Traffic Volumes are Measured

The airline industry uses two methods to measure air traffic. The first is to count the number of persons physically boarding an aircraft. This "enplaned-deplaned" measure accurately reflects the level of activity, but usually fails to capture the destination of the traffic. At hubs, where many passengers make connections, it overstates the number of persons traveling to or from the community itself. The Virgin Islands Port Authority assembles and distributes enplaned-deplaned traffic statistics from operating statements regularly submitted by the airlines. The Department of Transportation also assembles five reports on enplaned-deplaned traffic at every airport in the nation[17].

The second definition is the "origin-destination" passenger. This measure considers the true itinerary of each passenger; where he or she originally started the journey, and the final destination. This could include several intermediate connections. Origin-destination statistics are usually developed from airline sales reports or reservations systems. The Department of Transportation requires all large U.S. carriers to submit a 10% sample of tickets sold in each quarter to compile its origin-

[17] The DOT's reports are based on reports produced by the airlines. The "segment" reports show, by month, airline, city-pair and aircraft type, total passengers, air freight and mail carried by flight segment. The "market" report shows, by airline and month, total passengers, air freight and mail carried between every city-pair for which through flights are available. There are separate segment and market reports for international and domestic routes. A commuter airline traffic report shows, by airline, city-pair and quarter, total passengers, air freight and mail actually carried. This report summarizes traffic of airlines operating under Part 298 of the Federal Aviation Act.

destination reports. The database shows, by domestic and international city-pair, the number of passengers, airline, routing, fare class and enroute itinerary.

The two sources of data seldom agree perfectly. The airline accounting systems usually have several sources of lags that reflect differences in the date of sale, the beginning of the journey, the end of the journey, and the date on which the fare paid is officially counted as revenue. Although the DOT strives to maintain a uniform reporting system, the are minor differences in how each airline prepares its sample.

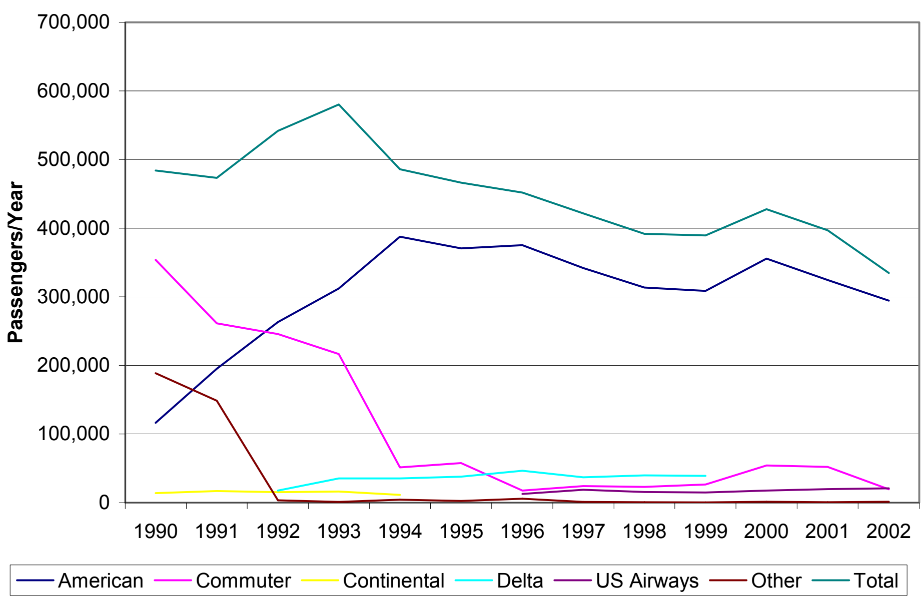
C. Enplaned-Deplaned Traffic

Appendix D provides a detailed report of flight performance (enplaned-deplaned) traffic at the St. Thomas and St. Croix airports by airline and destination, and summary tables. It shows the traffic of “large” airlines, which report to the DOT’s T-100 reports. Appendix E shows commuter airlines’ traffic; those carriers submitting data to the C-298 report. The large decreases in commuter traffic and corresponding increases in mainline volumes result from Executive Airlines’ changes from a “commuter” to a “mainline” carrier after its acquisition by American Airlines, with new requirements for reporting data.

St. Croix

Exhibit IV-1 shows traffic for the Henry E. Rohlsen Airport in St. Croix. The decline of the “Other” airline traffic in the early 1990’s reflects the failure of Eastern and Pan American. Commuter airlines traffic declined during the same period because of the discontinuation of operations by Aviation Associates and Executive Air Charter.

Exhibit IV-1. Traffic at the Henry E. Rohlsen Airport, St. Croix



Source: United States Department of Transportation Reports 28DM and C298

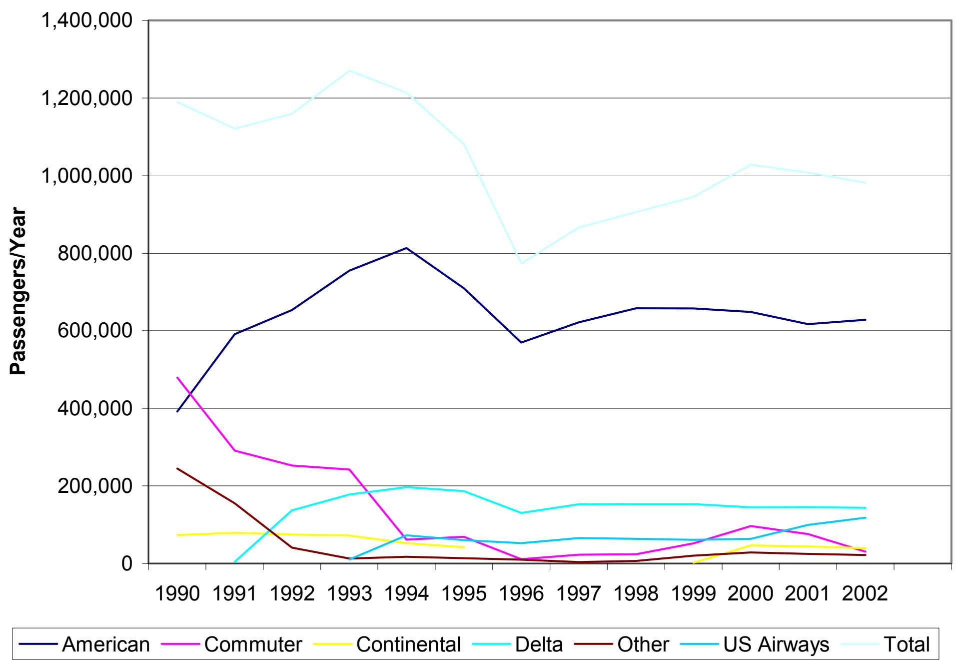
The graph shows several important facts about air services at St. Croix:

- Traffic at St. Croix fell steadily from 1990 to 2002, with decreases in 10 of the 12 years. By 2002, its traffic volumes were less than half those of 1990. This could result from the progressive worsening of air services and a general decline in the tourism industry. A second, and misleading cause would be runway improvements at St. Thomas, which reduced the need for aircraft to stop in St. Croix while returning to the mainland. Passengers on these flights could have been counted as enplanements or deplanements at St. Croix. The decline has, however, continued well beyond this potential anomaly;
- Continental and Delta carried few passengers to and from St. Croix, and discontinued services in 1994 and 1999, respectively. Their withdrawal, while reducing passenger choice, did not contribute significantly to the decline of traffic;
- American Airlines and American Eagle have a strong dominance of the market; and
- US Airways has steadily grown at St. Croix, but it is far from being large enough to counterbalance the marketing power of American.

St. Thomas

Exhibit IV-2 depicts the recent history of traffic at St. Thomas.

Exhibit IV-2. Traffic at the Cyril E. King Airport, Airport, St. Thomas



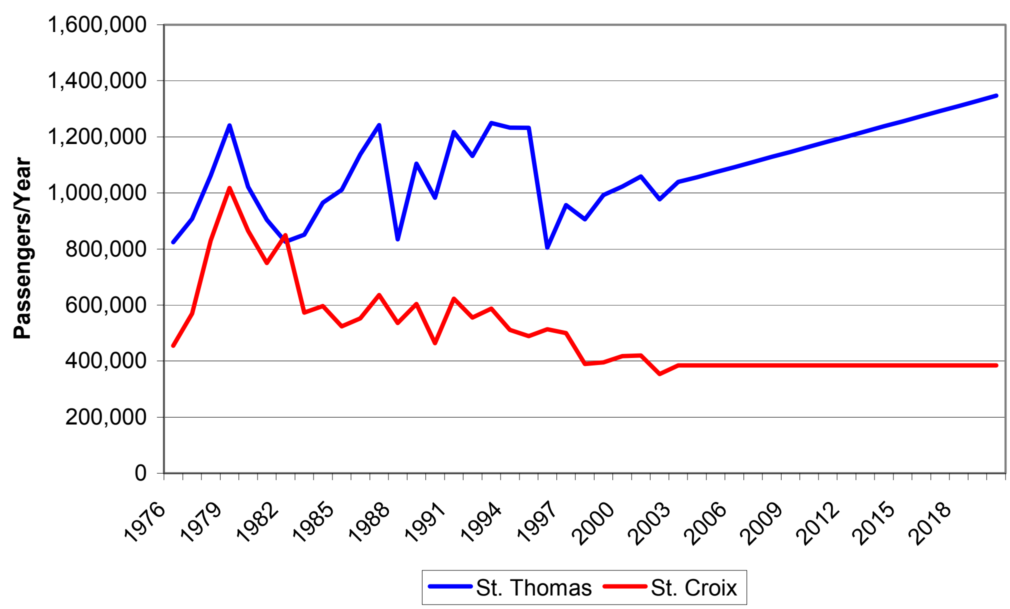
Source: United States Department of Transportation Reports 28DM and C298

It provides several important insights:

- Traffic at St. Thomas showed a pronounced trough in 1996 reflecting Hurricane Marilyn in 1995, followed by a recovery to 2000;
- The post-2000 decline resulting from the weak economy and the 9-11 terrorist attacks was relatively mild;
- Traffic from "other" airlines declined in 1990-1992 after the failure of Eastern and Pan American;
- American/American Eagle has a market dominance at St. Thomas; but to a lesser extent than at St. Croix;
- US Airways, Delta and Continental, although collectively far smaller than American, are sufficiently large to provide meaningful competition.

The Federal Aviation Administration produces forecasts of traffic for all major airports. Exhibit IV-3 depicts the traffic history at each airport from 1976, and its anticipated growth through to 2020. While the FAA believes that traffic at St. Thomas will continue to grow, re-attaining its 1993 maximum by 2015. However, the FAA is very bearish about St. Croix. It expects traffic to stabilize at current values. This forecast reflects the airport's long-term traffic decline. The FAA emphasized that it would revise this forecast if given sufficient reason to do so.

Exhibit IV-3. FAA Forecasts for Traffic at St. Thomas and St. Croix



Source: Federal Aviation Administration

D. Load Factors

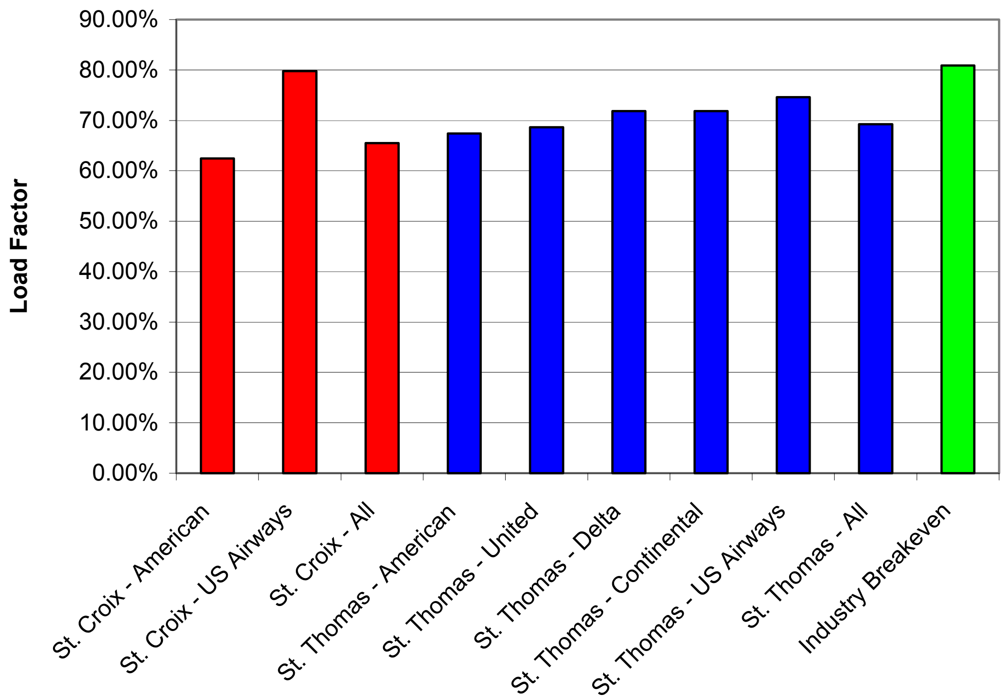
The "load factor" is the portion of occupied seats on a flight or service. The load factor and the average revenue per seat are key determinants of the profitability of a route. Since traffic varies by season, day of week and time of day, load factors in excess of 80% usually indicate that many flights are operating full, and that the carrier is turning away traffic. Airlines therefore face important tradeoffs in obtaining the load factor that maximizes total profitability. Business-oriented routes, where passengers require high frequencies, and pay relatively high fares, have lower load factors, and higher revenues per seat, than low frequency leisure routes, where many passengers pay particularly low fares.

Appendix F provides detailed information on load factors for St. Croix and St. Thomas by carrier and route. Figure III-4 summarizes the data by carrier and airport. The highest load factors were generated by US Airways at St. Croix for the St. Thomas-St. Croix-Philadelphia flight. However, average load factors at both airports were less than 70%. This is low for a predominantly leisure destination. Furthermore, discussions with airline managers revealed that the flights are popular with travelers redeeming frequent flyer points. On one carrier, this component exceeded 25%.

The rightmost bar in Exhibit IV-4 shows the breakeven load factor for the U.S. airline industry as a whole. This value, 80.9%, represents the load factor necessary for a zero-profit performance under industry-average costs and fares. This hurdle is at historically high levels, and reflects the severe decline in fares since 2000 and the high fuel costs resulting from problems in the Middle East. Neither St. Thomas nor St. Croix attain the break-even level. While system-wide aggregates must be interpreted cautiously, several findings are evident:

- It is likely that the airlines are losing money serving the Virgin Islands. This does not make their St. Thomas-St. Croix services unique; they are generating huge losses system-wide.
- The large aircraft serving the Islands (mostly 757's, 737's and A-320's) have low costs per seat mile. However, revenues per seat-mile are also relatively low because most Virgin Island-mainland passengers are flying long distances. Breakeven load factors for the Virgin Islands may be lower, or higher, than the 80.9%; and
- Current load factors suggest that the Islands do not suffer from a "capacity problem" per se; there is no evidence of a chronic shortage of seat capacity. Thus the goal of increasing air arrivals to the Virgin Islands can be attained even with the existing level of capacity.

Exhibit IV-4. Load Factors by Airline at St. Croix and St. Thomas



Source: United States Department of Transportation Report 28DS
Air Transport Association, "U.S. Airlines – The Road to Resuscitation," January 2003

E. Origin-Destination Traffic

All major U.S. airlines[18] submit a 10% sample of ticket coupons sold to the United States Department of Transportation every quarter. The DOT consolidates the samples from each airline, performs a series of edits, and compiles several databases which present traffic flows by city-pair. The databases, which include fare and routing information, provide the most comprehensive source of regional traffic patterns in the nation.

The Virgin Islands Bureau of Economic Research monitors visitor trends through an exit survey. The Origin-Destination databases provide a second source of detailed travel information. The database distinguishes between travelers originating in the

[18] The definition of those airlines required to submit a coupon sample is based upon annual revenues and the passenger capacities of aircraft operated. Of the airlines serving the Virgin Islands, American, American Eagle, Continental, Delta, United and US Airways participate in the study. Cape Air, Air Sunshine, Air St. Thomas, Coastal Air Transport and floatplane operator Seaborne do not participate. They report to the less detailed C298 report. As a foreign carrier, LIAT is not required to submit a 10% coupon sample.

Islands and traveling to or from other points, and off-island visitors. However, it does not capture any information on purpose of trip.

Appendices G through L provide detailed information for St. Croix and St. Thomas by destination:

- G Origin-Destination Passengers 1995-2002, St. Croix
- H Origin-Destination Passengers 1995-2002, St. Thomas
- I Detailed Origin-Destination Traffic Profile, 2002 for St. Croix
- J Detailed Origin-Destination Traffic Profile, 2002 for St. Thomas
- K Inbound Air Arrivals to St. Croix
- L Inbound Air Arrivals to St. Stomas

St. Croix

Exhibit IV-5 summarizes the origin-destination statistics for St. Croix. Since the database contains literally hundreds of destinations, traffic flows have been aggregated by region. The graph records a steady decline in traffic to the other Virgin Islands and to Puerto Rico.

Other regions have experienced steady growth. Traffic to the Midwest, Central States (Texas, Oklahoma, New Mexico, Colorado, Wyoming) and the Far West (Arizona, California, the Pacific Northwest, Alaska, Hawaii), while growing, is still modest and would be insufficient to support daily services to new gateways. While the decline of traffic at the Henry Rohlsen airport is clearly a key concern of this Study, the airport's long haul traffic has been performing well.

St. Thomas

Exhibit IV-6 provides similar data for St. Thomas. It follows similar patterns St. Croix; declining traffic to Puerto Rico and the other Virgin Islands, combined with healthy long haul markets. Traffic to the northeastern states (north of Virginia but including Washington) grew robustly, generating the largest level of activity by far. New York City alone generates over 200,000 passengers per year, or 280 in each direction daily. Destinations in the Midwest, Central and Western regions also displayed strong growth; the two latter generating nearly 100 passengers per day in each direction.

Both St. Thomas and St. Croix depend primarily on inbound travel. In 2002, 62.01% of the traffic at Croix consisted of arriving and departing visitors. This proportion was even higher at St. Thomas, with 88.75% of the traffic originating elsewhere.

Exhibit IV-5. Origin-Destination Traffic at St. Croix, 1995-2002

Source: United States Department of Transportation Database 1B

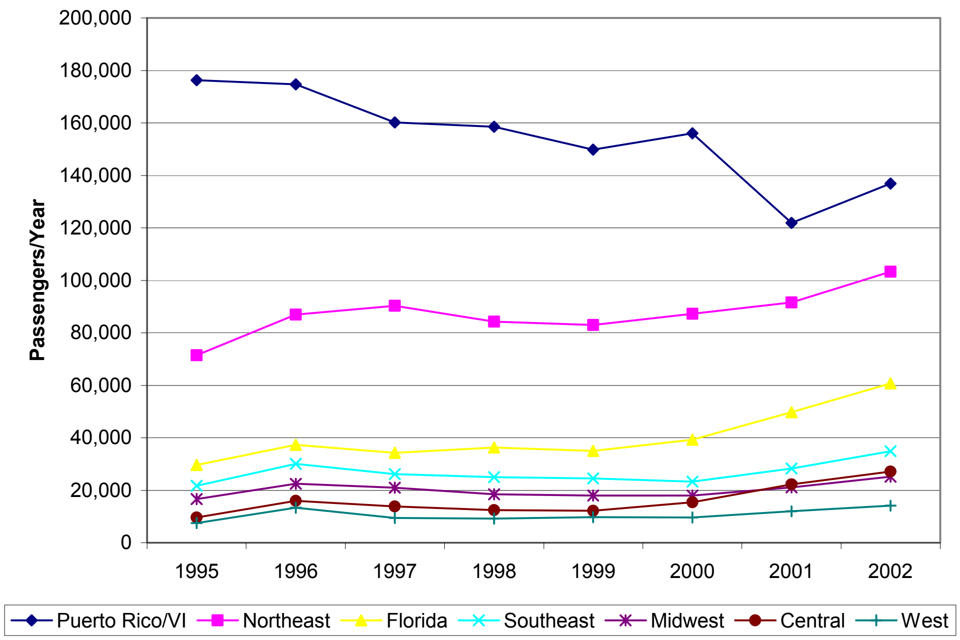
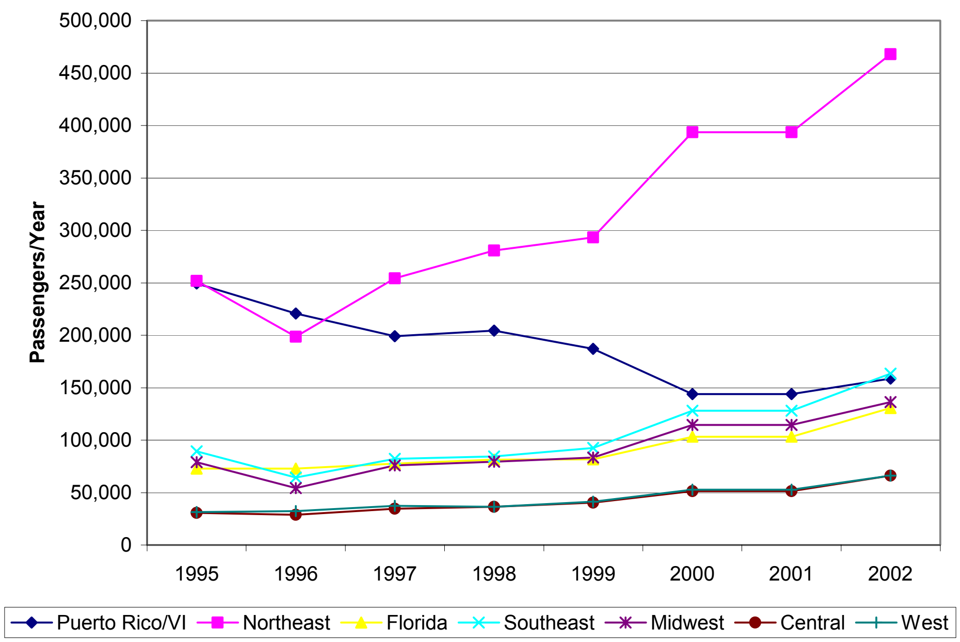


Exhibit IV-6. Origin-Destination Traffic at St. Thomas, 1995-2002



Source: United States Department of Transportation Database 1B

F. International Traffic

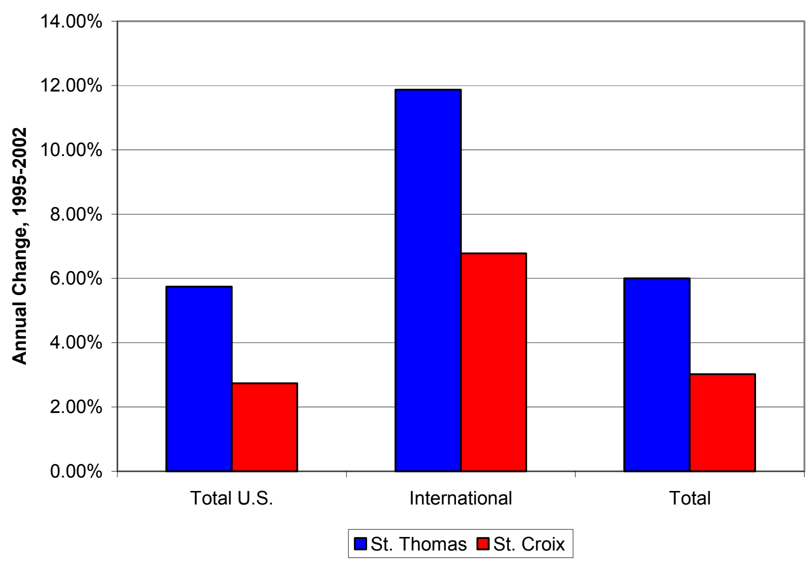
Information on international travel is limited. Foreign carriers such as LIAT do not contribute to the DOT's ticket coupon survey. In order to protect the contributing carriers, the DOT forbids international origin-destination data to be publicly disclosed. It does, however, publish the international flows recorded in its C298 commuter and onboard data bases. Other anomalies can cause an under-reporting of traffic.

Appendix M summarizes the modest information available. In 1991, British West Indian Airways accommodated nearly 15,000 passengers at St. Croix. Some passengers from the Virgin Islands travel via American Eagle to San Juan, and connect to other points in the Caribbean. The appendix also shows charter traffic between St. Thomas and London,

The origin-destination report provides information on scheduled international traffic. While information as to the specific destinations, routings and fares cannot be released publicly, traffic totals using domestic services to access international flights can be cited. In the year ending June 30, 2002, St. Thomas boarded nearly 66,000 scheduled passengers connecting downline to international services. This was 5.52% of the traffic boarded on mainline carriers. During the same period, St. Croix accommodated 35,000 passengers, comprising 8.07% of its mainline traffic.

Although direct international services are limited, international traffic has displayed strong growth at both airports. Exhibit IV-7 summarizes annual growth rates since 1995 for domestic, international and total traffic.

Exhibit IV-7. Growth of Scheduled International and Domestic Origin-Destination Traffic, St. Thomas and St. Croix



Source: United States Department of Transportation Database 1B

At St. Croix and St. Thomas, international traffic grew at double the rate of domestic markets. With domestic markets relatively mature, and international markets in their infancy, this performance suggests that a greater emphasis on international markets would be part of a program for increasing air arrivals. While direct international services would be necessary to attract a large number of visitors, foreign connections with current domestic services could be part of a process for incrementally expanding traffic.

G. Connecting Traffic

Through serving connecting passengers, an airport can obtain a much higher level of service than could be supported by its immediate traffic. Hub airports such as Dallas/Fort Worth, Cincinnati and Charlotte have become large-scale domestic and international gateways through their reliance on connecting traffic. Balanced against these advantages are the airports' loss of power to the hub carrier and their increased risk. At most hubs, the weakened competition forces local passengers to pay a premium for fares. Low cost carriers such as Southwest Airlines are often reluctant to serve a hub airport. Any risks faced by the hub airline confronts the airport with large uncertainties. Baltimore, Nashville, Dayton and Raleigh-Durham abruptly lost many services after their hub carriers retrenched. Chicago, Denver, San Francisco and Washington are gravely concerned about the survival of hub airline United Airlines.

The hub concept is important to the Virgin Islands in two respects. First, St. Thomas currently serves as a hub, for passengers traveling to St. John and the British Virgin Islands. Second, several parties are interested in developing either St. Thomas or St. Croix as an air hub for the eastern Caribbean.

Exhibit IV-8 shows total commuter air traffic between St. Thomas and the British Virgin Islands. Even if all the passengers shown on the table were connecting between mainland and BVI flights, the traffic flows are small. However, the table excludes passengers who fly between the U.S. mainland and St. Thomas, and make onward connections by ferry.

Airport improvements in the British Virgin Islands will likely reduce the importance of St. Thomas as the regional gateway. Under a US$55 million expansion project, Tortola' Beef Island Airport (to be renamed the Terrence B. Lettsome International Airport) will obtain a new terminal, expanded apron, new control tower and a better access road. The 3,600' runway will be lengthened to 4,600' to accommodate American Eagle's 64-seat ATR-72. This will encourage passengers to fly directly to the BVI from San Juan

The DOT's origin-destination database also indicated that current volumes of connecting traffic are modest. Fewer than 7,000 passengers annually connect between the U.S. mainland or Puerto Rico and other points in the Caribbean at St. Thomas. At St. Croix, the corresponding traffic flows are less than 800 passengers. While these findings neither support nor refute plans for developing a hub in the Virgin Islands, they do show that such an operation would rely on altogether "new" traffic rather than existing volumes. This concept is discussed in more detail in Section VI.

Exhibit IV-8. Commuter Airline Traffic between St. Thomas and British Virgin Islands

Year	Passengers
1990	7,042
1991	8,514
1992	9,669
1993	10,899
1994	5,855
1995	2,941
1996	1,397
1997	2,505
1998	1,812
1999	1,352
2000	3,586
2001	4,716
2002	1,939

Source: United States Department of Transportation Report C298

H. Fares to and from the Virgin Islands

Fares to the US Virgin Islands remain a concern not only for inbound tourists, but also for Island residents traveling to the United States. This section examines fares to and from airports in the Virgin Islands. It examines differentials between short notice and advance purchase fares, in order to determine if the differentials for the Virgin Islands are unusual. It also considers the totality of fares to and from St. Croix and St. Thomas, to determine if the Virgin Islands suffers from a broad-based fares problem.

Advance Purchase and Short Notice Fares

A common complaint during the interviews with Virgin Island businesses was high fares. While advance-purchase fares were judged acceptable, many persons cited the need to travel from the Islands on short notice. They considered the fares charged to be altogether excessive.

The EK Team tested the validity of these claims by comparing St. Thomas/St. Croix fares to those from other airports. The Team considered both next-day and 14-day advance purchase fares available through Orbitz. For comparison purposes, the team selected coastal cities in the Southeast with limited competition from low fare airlines. Results are displayed in Exhibit IV-9.

Exhibit IV-9. Virgin Islands Fare Comparison

	Return Fare	
Routes	**1 day out**	**14 days**
Distances greater than 1000 miles but less than 1599		
Charleston-New Orleans	$1,311	$472
Richmond to Dallas	$1,618	$468
St. Croix to Miami	$568	$469
St. Thomas to Atlanta	$834	$585
St. Thomas to Miami	$559	$446
Distances greater than 1,600miles but less than 1,999 miles		
Charleston-Phoenix	$975	$578
Richmond to Phoenix	$784	$518
St. Croix to Atlanta	$748	$603
St. Croix to New York (JFK)	$603	$453
St. Thomas to New York (JFK)	$593	$317
Distances greater than 2,000 miles but less than 2,999 miles		
Charleston-Los Angeles	$928	$695
Charleston-Seattle	$1,197	$691
Richmond to Los Angeles	$901	$555
Richmond to Seattle	$1,023	$648
St. Croix to Chicago	$533	$503
St. Thomas to Chicago	$654	$481
Distances Greater than 3,000 miles		
St. Croix to Los Angeles	$921	$678
St. Croix to Phoenix	$770	$679
St. Thomas to Los Angeles	$995	$658
St. Thomas to Phoenix	$899	$661

Source: Orbitz

The table indicates that both advance purchase and next-day fares from St. Thomas and St. Croix are comparable to fares charged for journeys of similar length from airports on the mainland. While travelers may object to paying high fares to travel on short notice, they are not being treated any differently than their counterparts on the mainland. Charging last minute, “must go” passengers a very high premium is a cherished principle of airline pricing, both from the Virgin Islands and from airports throughout the world. The major exceptions to this behavior are low fare airlines such as Southwest, who offer a simplified tariff structure in which differences between walk-up and restricted economy fares are modest.

Some persons interviewed suggested that one desired outcome of this study would be the availability of a walk-up fare comparable to the advance notice rates. However, residents of the Islands are not being “singled out” by this pricing behavior. The EK Team believes that the airlines would be very reluctant to agree to such a fare, or to set a precedent that might complicate their pricing behavior on the mainland. Those passengers paying premium fares are vital to the profitability of air services to St. Thomas and St. Croix. The revenues they provide give the airlines the hope of operating profitability at current load factors. The airlines can then sell any remaining seats at the discounted advance-purchase fares needed to support the tourist industry.

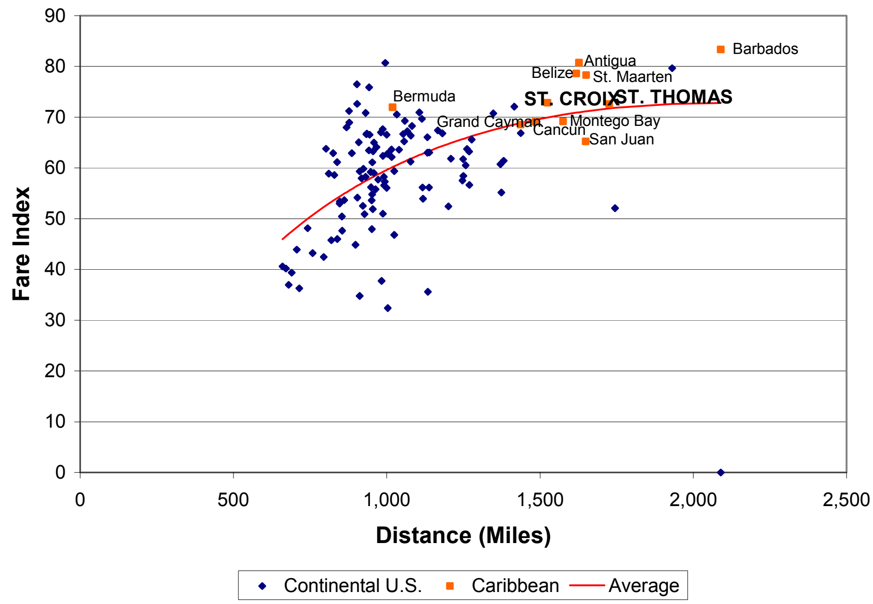
The fares comparison illustrates the anomalies of airline pricing. The St. Thomas-Atlanta fare of $834 compares to a St. Croix-Atlanta fare of $748. The fare from St. Thomas is based on Delta’s nonstop service. From St. Croix, passengers would need to transit Miami or San Juan. They could also fly by commuter aircraft to St. Thomas. The fare from St. Croix is set to make the service competitive with Delta’s flight from St. Thomas.

Average Fares at St. Croix/St. Thomas and Other Airports

A second analysis considered the overall level of fares relative to other destinations. Average fares at St. Thomas and St. Croix were compared to those at other airports in the U.S., and at competing airports in the Caribbean. Except for San Juan, all mainland airports ranged between 200,000 and 2,000,000 origin-destination passengers annually. Average fares at an airport depend on the mix of destinations, distance traveled, the distribution between leisure and business travel, airline competition, proximity to other airports, seasonality of traffic, and other factors. Finally, the fare data applies to the 2001-2002 period, in the industry faced considerable stress because of the large decline in revenues. These circumstances make any simple comparison of average fares difficult, and render charged statements about the reasonableness of fares at one particular community unreliable and potentially misleading.

Exhibit IV-10 displays the analysis of fares. The red line denotes a “mean” fare in relation to distance, although deviations are large. A fare index was constructed to avoid disclosing international fare data.

Exhibit IV-10. Average Domestic Fares at St. Croix, St. Thomas and Other Airports



Source: United States Department of Transportation Database 1B, Year Ending June 30, 2002

Exhibit IV-10 shows that fares at St. Thomas and St. Croix (excluding frequent flyer redemptions and intra-Caribbean passengers) lie slightly above the mean fare line. However, the differences are too small to be statistically significant, especially when considered in light of the overall dispersion from the mean. Furthermore, the Virgin Islands lie below several competing destinations in the Caribbean. While higher than other points such as Cancun or Montego Bay, the Virgin Islands lie within a cluster of Caribbean destinations. Average fares are higher than those from San Juan because of the intense competition for the large Puerto Rico-mainland traffic.

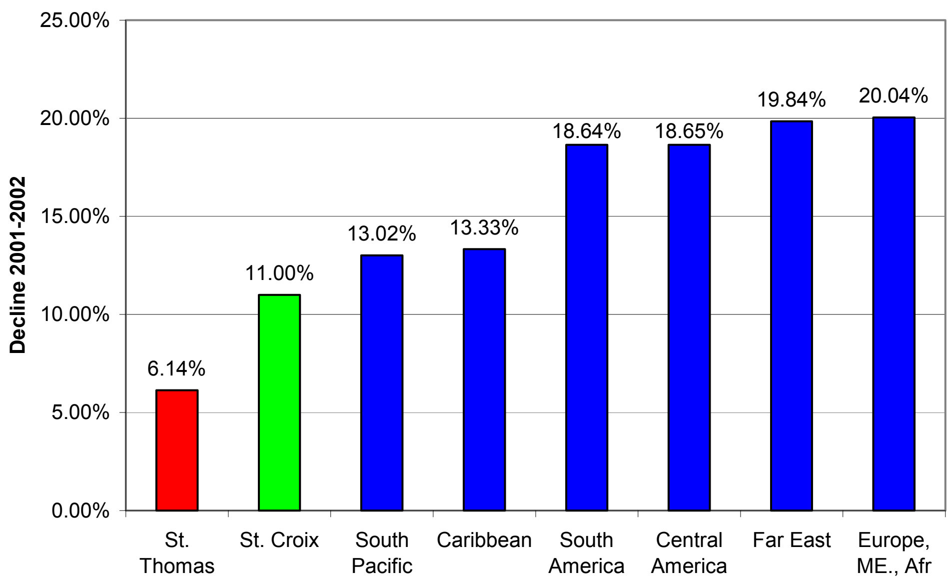
This analysis suggests that the average level of fares at St. Croix and St. Thomas are, once travel distances are considered, commensurate with those charged at airports on the mainland. There is no evidence that travelers to and from the Virgin Islands are paying excessive prices. Furthermore, the current regime of air fares does not render the Islands at a major competitive disadvantage in competing with other Caribbean destinations for inbound tourists.

I. Impact of the September 11 Attacks

The terrorist attacks on New York and Washington precipitated a severe decline in air traffic and airline revenues. The attacks occurred at the time that many travelers were making winter vacation plans, making the Virgin Islands particularly vulnerable. According to the World Travel and Tourism Council, personal travel and tourism to the Virgin Islands fell by .1%. However, business travel suffered a 26.1% decline[19]. This is consistent with experience elsewhere, in which business travel suffered the steepest decline.

Exhibit IV-11 portrays data on the impact of the attacks for the Virgin Islands and other world areas. For St. Thomas and St. Croix, it uses data provided by the Virgin Islands Port Authority, with an October 1-September 30 fiscal year. Other regions use data of the United States Department of Transportation, with an August 1-July 30 year[20]

Exhibit IV-11. Impact of September 11 Attacks on Air Traffic



Source: Virgin Islands Port Authority, United States Department of Transportation Report 28IM

[19] World Travel and Tourism Council, "Virgin Islands – The Impact of Travel and Tourism on Jobs and the Economy – 2002 plus Special Report on September 11th Impacts", 2002
[20] The DOT's T-100 report is subject to a reporting lag; the data used were the most recent available.

The graph shows that St. Croix and St. Thomas were less affected by the attacks and the ensuing industry downturn than other world areas. Significantly, other points within the Caribbean experienced a larger decline than the Virgin Islands. Trans Atlantic services and routes to the Far East were particularly affected, and suffered further declines from anxieties about the Iraq War. The recent (Spring 2003) difficulties with the Sudden Acute Respiratory Syndrome (SARS) has caused a further decline in trans Pacific traffic.

The traffic declines at St. Croix and St. Thomas were similar to those suffered at other U.S. airports. In 2002, 219 airports accommodated more than 100,000 domestic enplaned-deplaned passengers. They collectively withstood a 9.02% decline in domestic passengers[21]. Of the 219 airports, 86 experienced larger percentage traffic declines than St. Croix. 127 airports suffered larger relative traffic declines than St. Thomas.

J. Summary

An initiative to increase arrivals at airports in the Virgin Islands must address the airline industry and its needs, current air services and traffic at the St. Croix and St. Thomas airports, and factors affecting the promotion of the Islands as a business and leisure destination. This chapter has summarized the second element. It has provided the necessary factual background on air services, traffic and fares on which the initiative must build. The major conclusions of this chapter are as follows:

Enplaned-Deplaned Traffic

Traffic at St. Croix has fallen steadily in the late 1990’s. Current volumes are less than half those of the early 1980’s. The decline since 1995 results primarily from reduced boardings by American Airlines, exacerbated by the cessation of services by Delta Air Lines and Continental. Air traffic fell in 1995 at St. Thomas following Hurricane Marilyn. It has grown steadily through the late 1990’s. American Airlines’ traffic has increased modestly; most of the growth resulted from greater activity by US Airways and Continental.

Load Factors

Load factors from St. Thomas and St. Croix remain within the 65-70% range. US Airways generates the highest load factors with 80% on the St. Croix-Philadelphia flight. These load factors are not unduly high for a leisure destination, and are significantly below the breakeven load factor for the airline industry as a whole. The Islands’ mediocre load factors suggest that aggregate seat capacities are adequate, and that there is no shortage of raw lift.

[21] Source: United States Department of Transportation Database 28DS

Domestic Origin-Destination Traffic

The number of passengers traveling between St. Croix/St. Thomas and Puerto Rico has declined steadily since 1995. Long haul markets to the U.S. mainland have experienced steady growth. The St. Thomas-Northeast U.S. market has shown a particularly strong performance, although other regions have also seen rapid growth. Since the likely focus of any initiative to increase air arrivals must focus primarily on long haul services, this performance is very encouraging.

International Origin-Destination Traffic

Direct international traffic to neighboring islands in the Caribbean is modest. However, long haul international passengers, traveling to and from the Virgin Islands, account for 8.07% of the mainline traffic boarded in St. Croix and 5.52% at St. Thomas. At both airports, this component has grown at twice the rate of domestic traffic.

Connecting Traffic

Although St. Thomas is the gateway to the Virgin Islands, the quantity of connecting traffic is modest. Most passengers traveling onward from the Cyril E. King Airport to the British Virgin Islands use ferries rather than scheduled aircraft. The aviation statistics therefore suggest that air-to-air connection traffic is very limited.

Fares

Fares for travel to and from the Virgin Islands on short notice are much higher than advance purchase fares. This differential is a major source of frustration for residents of the Islands and its business community. However, the airlines follow similar pricing policies on the U.S. mainland. There is no evidence to suggest that the Islands are being treated in any unfair or discriminatory manner.

The level of average fares to and from St. Croix and St. Thomas is commensurate with the average distance traveled. Average fares are somewhat higher than the norm, but the modest differences are not statistically significant. Average fares to and from the Islands are higher than for some Caribbean destinations but lower than others. Fare differentials between the Virgin Islands and competing resorts are not sufficient to provide any major advantage nor pose any disadvantage in attracting vacationers to St. Thomas and St. Croix.

V. ORGANIZATIONAL AND COMMUNITY PERSPECTIVES

A. Introduction

Unlike the majority of major US airports or their governing bodies, the United states Virgin Islands has neither a structured, formalized air service development program housed within a single government department/agency, nor a key individual responsible for leading efforts to enhance air service to the Islands. Thus, an essential task was to undertake a broad based, comprehensive interview program of government and community and business leaders to obtain an understanding of past efforts, results and nature of participation in air service marketing and development. It was the hope of the EK Team that the information and data gathered during this process would aid in the formulation of a comprehensive air service development strategy/plan that would:

- Increase air arrivals at St. Croix and St. Thomas;
- Provide a set of clear and realistic but ambitious air service goals;
- Be cost-effective; and
- Promote the economic development of the Islands.

A concurrent interview program was conducted with key airline officials with an interest in Islands. The findings of interviews with the airline executives are presented in Section VI.

At the outset of the project, the Steering Committee provided Edwards & Kelcey with a preliminary list of key individuals/organizations to be contacted. Throughout the extensive interview program, many additional recommendations for contacts were received, scheduled and conducted. A complete list of those participants involved in this phase of the project is contained in Appendix B.

The key objectives of the interview program were to:

1. understand the mandates, roles and responsibilities of various government departments/agencies as related to air service development;
2. understand the roles and specific interests of private sector parties and their associations as related to air service development;
3. collect relevant data and information;
4. review current and previous initiatives in air service development; relevant studies and documentation; and
5. identify key issues and potential solutions from the perspective of the interviewees.

The preliminary draft findings of the interviews were summarized and distributed for comment to the Steering Committee on April 8, 2003. The original information collected, and subsequent research have been integrated, analyzed and are presented below.

B. Major Findings - General

1. *The economic importance/impact of quality air services to the overall economy of the USVI is not widely understood.*

2. *A Comprehensive Air Service Marketing Plan/Strategy has not been developed for the USVI*

As was mentioned previously, most major airports/destinations develop and maintain current, a comprehensive plan for air service marketing and development. The plan is updated on an annual basis to reflect changes in the industry and, if appropriate, specific economic objectives of the airport. Detailed analysis is carried out of potential for expansion of existing routes, or of acquiring new routes/service. Subsequent to the analysis, a recommended strategy is formulated which comprises the "workplan" for the year. Budget allocations for carrying out the marketing plan are formulated based upon priorities identified in the plan. Contingencies are built in for unanticipated "targets of opportunity" which were not originally captured in the marketing plan. Endorsement of the plan and strategies contained within this document will comprise the first comprehensive air service strategy for the USVI.

3. *There Exists no Clear Responsibility/Accountability for the Development and Management of an ongoing Air Service Development/Marketing Program*

The interview process revealed that officials from several government departments, private sector agencies, as well as prominent individuals, have conducted "marketing" activities with the airlines. Such "marketing" activities range from attending conferences related to air service development, visiting airline executives, making formal presentations to airlines for service, encouraging formation of new airlines, etc.

The enabling legislation for the Virgin Islands Port Authority (VIPA), the Department of Tourism, the Economic Development Authority and the Department of Planning and Natural Resources was examined for clarification of responsibility with respect to the air service development/marketing function. While such responsibilities have not been called out specifically, the language is such that every agency could interpret a role for itself in air service marketing efforts. In many cases, the interaction between government departments and private sector organizations, such as the Hotel Associations, Chambers of Commerce etc. has lent itself to joint and separate efforts aimed at increasing air service to the VI. In additional instances, perceived government inaction has resulted in the private sector pursuing initiatives independently.

Overall, it was concluded that air service marketing efforts are weak, and fragmented among many organizations which lack a specific mandate to carry out this mission, and who are not working together. Generally speaking, air service promotional efforts are poorly integrated with tourism/economic development efforts, and lack long-term consistency. In addition, there was clear evidence of inter-agency, inter-island and public-private rivalry.

Bearing witness to the findings above, a draft Bill (No. 25-0015) "To amend title 29 of the Virgin Islands Code, to establish the Virgin Islands Tourist Authority" was tabled in April 2003 and is still under review. While the bill seeks to bring the "tourism" elements of various departments under one Authority, an analogous point can be made that the responsibility for air service marketing and development requires a similar approach i.e. to be housed in one department.

The preceding findings were supplemented by specific issues identified in the interviews as they relate to the two islands - St. Thomas and St. Croix. While an umbrella air service development/marketing strategy for the USVI is essential, as much as possible, it must take into consideration the distinct issues and requirements for each island. As there are no major industrial/business demands for air service, tourism and the different nature of the tourist offering for each island are inextricably intertwined with air service issues. Consequently, many of the issues raised during the interview process were related to tourism. The issues/findings related to these two markets are presented below.

C. Organizational/Community Perspectives Related to Air Service Marketing and Development – St. Thomas

Tourism/Destination Issues

STT continues to serve as a “gateway” to the Virgin Islands and other destinations within the Caribbean. The prominence and role of STT as a “gateway” has been eroded with the aggressive development of San Juan, and may be further challenged as the airport expansion in Tortola is completed in 2004. Those interviewed expressed the opinion that the image of the destination, as a destination (St. Thomas) is not well defined. It was felt that advertising dollars would be better spent targeting organizations that actually deliver people to the islands i.e. wholesalers, travel agents, and airline travel departments.

The recent introduction of ACT 6390, dated February 1, 2001, “To Amend Title 29, Chapter 12, Virgin Islands Code, Relating to Economic Development Commission Benefits and for other Related Purposes,” has resulted in considerable relocation of industry executives due to the tax incentives provided. It was felt that there was growing success in attracting senior executives of corporations to locate and take up residence in the USVI, however, for those without corporate aircraft, access would continue to be an issue. Seasonal service was also identified as an issue.

With respect to the hotel aspect of the tourism product, there was widespread opinion in the private sector that the government was not responsive to their needs. On the opposite side, perception of some government officials was that businesses should be more active, and rely less on government initiatives in the promotion of business. On St. Thomas, there currently are sufficient hotels to meet demand, and the current inventory could support additional lift. Many private sector and government individuals interviewed, were supportive in principle of the effort to establish a Tourist Authority.

Airport/Air Service Issues

A critical element of any air service marketing development program is the management, operation adequacy and affordability of facilities of the destination airport. Both the Cyril E. King, and Henry E. Rohlsen airports are owned, operated and managed by the Virgin Islands Port Authority (VIPA). Opinions were expressed that the principal interest, focus and expertise of VIPA lay in the management of the Ports, and not the airports. There were no credentialed airport managers at either facility. Furthermore, with respect to air service development, the mandate of the Authority was focused on facility development and management, and not marketing of the facility. Their was ambivalence about the role of VIPA in air service development and marketing, with the majority of responses identifying the responsibility to be that of the Department of Tourism.

Users of the facility were critical of the terminal and apron layouts, maintenance and condition of facilities, and the operation and location of INS facilities. The location of concessions and revenues was also considered non – optimal. Widespread opinions were expressed that airport rates, fees and charges were amongst the highest in the Caribbean and that failure to address them could be a key factor in reduction and withdrawal of service. The different practices amongst the islands, however (e.g. departure taxes/fees etc) made this difficult to make valid comparisons.

In summary, airport management, operations, facilities, rates, fees and charges, were identified as issues to be considered in the formulation of an air service marketing and development plan.

D. Organizational/Community Perspectives Related to Air Service Marketing and Development – St. Croix

Tourism/Destination Issues

Tourism and destination issues were the major concerns of the officials interviewed on St. Croix. Indeed these have been fully documented and recommended action steps formulated in the St. Croix Economic Development Action Agenda[22] and the Department of Tourism's Marketing Strategy for St. Croix. The definition and success of an air service marketing strategy for STT is highly dependent on development and marketing of the destination.

High unemployment resulting from a soft tourism industry, weak jewelry sector and refinery cutbacks were cited as significant contributors. A critical finding from a tourism marketing perspective is that there is a need to market St. Croix more vigorously, and to differentiate St. Croix as a destination – separate customized marketing initiatives were recommended. There was also widespread concern that St. Croix is not sufficiently represented in Tourism promotion efforts.

Lack of a flagship hotel, conference center and absence of hotels with a large amount of rooms were also identified as issues. Past attempts at encouraging traffic and tourism with the introduction of casinos has been of limited impact.

Airport/Air Service Issues

The airfield and terminal facilities at the Henry E. Rohlsen airport were considered more that adequate. As STX is managed by VIPA, similar comments made

[22] Trend Associates, November 2001.

previously relating to the ownership, operation and management by VIPA, apply to STX.

As was illustrated in Section IV, traffic has declined significantly over the past five years and is not projected to increase in the near future. The completion of the runway extension may offer long-range air service potential, and this will be addressed in Section VII. There is an acute need for airlift, as fewer carriers, destinations, and seats are available to the mainland than from STT.

VI. AIRLINE PERSPECTIVE AND ANALYSIS

A. Introduction

A critical element in the development of a strategy to increase air arrivals to the USVI involves the collection of information from the key operators of air service to the islands, the scheduled air carriers. All the major airlines operating to the islands were contacted including: American, Continental, Delta, United, and US Airways. The conversations with the airlines were broad, and touched upon areas impacting the successful operation of routes to St. Thomas and St. Croix. The major areas of concern, which affect performance of airline routes to the Caribbean, are outlined below:

- Operational Issues
- Promotional Issues
- Airport Management Issues
- Incentives Issues

B. Operational Issues

The operational discussions with the airlines centered on the condition of service to the two USVI airports. Generally, the airlines were pleased with the yield and passenger performance of the market, noting the islands have a good mix of tourists, home owners / commuters and business people. In terms of yield (revenue per passenger per mile traveled) and passenger numbers, Delta estimated that the USVI ranks in the 50th percentile in both yield and passengers. The airlines operating to both St. Thomas and St. Croix, however, did express genuine concerns about the St. Croix market.

Airlines seek a favorable mix of passengers when operating co-joined markets. However, many of the airlines polled expressed concern that while the St. Thomas market is generally strong, the St. Croix market is critically weak. This places services to the St. Croix airport at risk. Delta Air Lines emphasized the reason their St. Croix extension was cancelled was the fact that St. Thomas was a strong enough market to justify an independent operation. Airlines that operate or had operated a co-joined service to St. Croix estimated only 1/4th to 1/5th of the passenger load was actually headed to St. Croix; usually a tag requires at least 1/3rd to ½ passenger loads to justify the operation.

Since the St. Thomas airport has aircraft / takeoff limitations, many airlines operate service to the island in conjunction with service to San Juan or St. Croix. This enables the airline to refuel in either St. Croix or San Juan, and travel to an eastern US hub with an acceptable payload. Tag operations are expensive; US Airways estimates the cost of its St. Thomas – St. Croix flight operation at $4,000 - $5,000 per flight.

United Airlines still operates A320 combination services to the USVI in conjunction with San Juan on flights from its hubs at Chicago and Washington (Dulles). Fully loaded A320's cannot execute departures from STT nonstop to their hubs at Chicago

and Washington; therefore they have combined two strong markets (San Juan and St. Thomas) to make the tag operation feasible. Due to the physical constraints of the St. Thomas airport and technical limitations of available aircraft, the some airlines must consider co-joined operational patterns when serving the USVI.
A second operational issue was the restrictive nature of scheduling aircraft to the region. Airlines noted the fact that travelers to the Caribbean want to leave the US in the morning and arrive by lunch. On the return the tourist wants to leave late in the day to maximize time on the islands. This “scheduling window” makes it difficult to use idle aircraft at other times of the day. It also contributes to congestion at the Caribbean airports, as flights tend to arrive and depart in one wave of activity in the afternoon.

C. Promotional Issues

The airlines interviewed for this study generally found the promotional authorities of the USVI helpful and proactive. They expressed appreciation for the work of the Department of Tourism, and offered no significant criticisms. The primary concerns the airlines had about promoting the USVI can be grouped into three categories:

- Differentiation
- Perception of criminal activity
- Ascendance of rivals
- Quality of tourist product (e.g. hotels)
- Importance of cruise traveler as repeat visitor

All the airlines noted that the USVI are a group of three distinct islands each with unique attributes. The USVI therefore has opportunities to differentiate its marketing to capture a larger segment of disparate travel groups. Several airlines urged a greater differentiation of destinations that capitalized on each island’s special characteristics. They believed that a single, integrated and uniform product positioning and message would fail to appeal to certain distinct segments of the leisure market. It would attract travelers with widely different vacation preferences who would otherwise have no awareness of the Islands’ appeal. This would answer the questions travelers have before planning a vacation, such as why visit the USVI, and what activities are available to experience and enjoy.

One airline indicated the key to marketing the USVI is finding the destinations each island competes with and targeting the market’s distributors. Efforts would be taken to familiarize them with the islands and have them critically review current marketing efforts. The airlines also noted that a way to increase air arrivals is to get feedback from the top sellers to each island of the USVI, have them to review the positive and negative aspects of each island, and then market to each island’s strength. Most airlines felt differentiating each island was the best way to market the USVI effectively; one airline however felt they should be marketed together, but as distinct islands emphasizing diversity, i.e., an island for every taste.

Every airline interviewed indicated there was a perception of security problems on St. Croix. Most airlines did not believe that there was an overwhelming basis for this perception; however, it remained an impediment to promoting St. Croix. One airline said the USVI needs to address the crime perception head-on much in the same way

South Florida addressed crime after several high-profile incidents with foreign tourists. They also noted the crime perception might stem from a more unhindered flow of media between the USVI and the mainland.

The airlines also noted the ascendance of newer rival resorts around the Caribbean. These resorts are new and offer value for the money. One airline said the primary challenge of the USVI is marketing against the emergence of the Dominican Republic. This airline called the Punta Cana “the next Cancun” and emphasized the excellent marketing job the Dominican Republic had done in promoting its destinations independently. The airline also remarked that Hilton now has four new properties on the island, which further validates its prominence as a destination.

This airline also mentioned that people used to visit the USVI as a vacation in conjunction with San Juan (Puerto Rico). Visitors would gamble in San Juan and then enjoy the USVI. This activity has declined. The airline emphasized the importance of connecting the USVI with vacationers headed to Puerto Rico, noting most airlines still offer stopover Puerto Rico – USVI packages.

On the hotel front, most airlines felt there were enough hotel rooms on the islands, but concern was expressed about the quality and suitability of the existing hotels. One airline noted St. Croix needed a half dozen to one dozen 80 – 150 room properties ranging from budget to five-star with one or two high-end properties. The airline indicated that the currently accepted flagship property, is “middle class and middle of the road” and did not have the critical mass to draw traffic to the island. The airline felt that there were sufficient quality hotel products on St. Thomas, but not enough quality offerings on St. Croix.

An airline cautioned against building large meeting or convention hotels on St. Croix. It emphasized that St. Thomas, Aruba, Cancun, and San Juan are the only places in the Caribbean capable of supporting meeting and convention traffic. The problem hinges on airlift; there is insufficient airlift to ensure 200 – 300 people arrive on *the same day*, which is a requirement for a meeting or convention. This means convention / meeting organizers would have to rely on charter transport, which significantly increases the costs of the event.

The airlines offered a range of perspectives on cruise ship travelers. One airline indicated that while the hoteliers regard cruise lines as the nemesis of the USVI, some airlines viewed the cruise traveler differently. They regard cruise ship passengers as those taking a regional familiarization trip and in search of a place *to return*. This airline urged the USVI to enhance the arrival experience of travelers to St. Thomas and St. Croix. They expressed concern about the cruise arrival process in St. Thomas. Sellers hawking their souvenirs immediately approach passengers arriving at St. Thomas. This airline feels the USVI could increase repeat traffic (by air), if the islands had a controlled, hassle-free environment for arrivals by cruise ship and a showcase harbor front in St. Thomas.

An airline mentioned that in the wake of 9/11 many islands were cutting prices as a means of increasing air arrivals. The airline was against such practices and favored the creation of “value-added” incentives rather than discounting. Some examples included islands that offered $200 credits for shopping and destinations that were paying the airfares for the bulk of tourists arriving at the island.

D. Airport Management Issues

Most of the airline comments about airport management centered on two themes, the airport costs and passenger processing. On the cost side, two carriers expressed strong concern over the recent airport cost increase and the process under which the costs were approved.

One airline claimed to have received only two-weeks notice before the new fees were implemented. This airline commented that the industry standard for airport cost increases is usually six to twelve months. The airline was frustrated in that capacity choices for the time period were locked in- taking into account the old cost structure. Therefore, the airline could not make last minute changes to its schedule to improve their revenue forecast. Had it known of the changes sooner, it already would have reduced its capacity accordingly. The airline's perception was that the cost increase was a "bad move" by the Port and that it will cost them in air service. This airline sent a representative to a schedule input meeting where they felt the rate increase was already a *fait accompli.* This airline also mentioned its representative received an unfriendly reception at the meeting. Airlines emphasized that the cost issue was a real detriment especially at a time when carriers are in bankruptcy and other Caribbean facilities are lowering fees. It makes an airlines' decision to expand or maintain service to the USVI difficult.

One interviewee also noted that the airport cost increases had a detrimental effect on the local economy. After the cost increase, this airline had to disengage the mainline ground handling staff and transfer those responsibilities to a regional airline – this resulted in a net reduction of about 25 employees. This carrier also said they have curtailed intra-island flights 25% as a result of the cost increase. Another airline indicated that they might have to pull St. Croix service in the winter because the new costs associated with the tag operation do not justify the service. Also, the airlines felt the USVI should not be charging two landing fees on a St. Croix – St. Thomas combination flight, as an intermediary stop for fuel is required on certain St. Thomas departures.

An airline commented about a perception that the airport users are bearing a higher load than the cruise ship users in part because the cruise line industry association is very "cohesive" in their bargaining with the Port. The airlines do not exercise this bargaining power because of the Sherman anti-trust act.

In conjunction with the concern over cost increases, a carrier expressed the opinion that the costs associated with the operation of VIPA were "out of control." This airline wondered whether the Port had considered alternative sources of revenue before coming to the airlines. This carrier indicated that, as a signatory to the bonds, they might request greater investigation and involvement in future management of the Port budget.

The passenger processing time was also a major concern expressed by the air carriers. Several airlines commented that the Port could play a more active role in the efficient processing of passengers. Departure processing has been particularly inefficient. One airline noted the lack of coordination between the Port, TSA, INS, Customs and Agriculture. The increased processing time has had impact in getting people through lines in time. One airline recommends arriving at the airport three hours in advance of departure. In several cases, aircraft departures have been delayed ,compromising onward connections at the arrival hub. Most airlines believe the physical plant is capable of processing the passengers, but the Port could play a more active role in seeking to ensure all areas staffed to maximum at peak periods. The airlines suggested that, while airport managers have little control over the various agencies, they can take the lead in encouraging all parties to seek a solution to such problems.

E. Incentives Issues

Incentives play a large role in attracting additional air service to many leisure communities. Most of the airlines interviewed recognize the value of incentives, however they indicated that the market must be viable before incentives are requested.

Most airports in the region offer incentives, the most common being the marketing incentive (co-marketing and co-branding). The airline interviewees stated that they will first look at an asset (e.g. aircraft), estimate the amount of revenue the asset will generate, and take into consideration how much market funding the destination is willing to contribute. The destination with the greatest revenue potential after marketing funds contributed generally gets the asset.

Several airlines expressed frustration with airports that give hefty incentives to new carriers to enter a market, when the incumbent airlines have spent the time necessary to grow and develop the market. These airlines have nothing against standard incentives, but they want to be treated equally.

Some airlines indicated that with new service or capacity additions, a waiver of airport fees for 60 – 90 days is general practice. This helps the airline “spool up” the new service and contribute to its early profitability. Another example includes Antigua, which in the post 9/11 environment eliminated landing fees to help airlines maintain services. The government is covering these expenses for the airlines. Other Caribbean airports have introduced incentives such as deferring office rents and renegotiating leases.

One airline commented that St. Thomas did not need incentives beyond marketing assistance. St. Thomas is a developed and proven market with a higher average number of carriers than other Caribbean airports. St. Croix however is yet unproven and may require incentives not normally afforded to carriers serving St. Thomas.

F. Summary

Based on the feedback provided from the airlines, several key conclusions to help improve air arrivals to the USVI are summarized below:

- The USVI comprises three distinct islands that can cater to several different groups of vacationers, there is an opportunity in marketing each island as a unique experience;
- The perception of criminal activity on St. Croix hinders its full development; efforts to dispel this perception will improve the prospect of additional St. Croix air arrivals;
- The enhancement of the cruise vacationers' experience on St. Thomas and St. Croix has the potential to build a loyal repeat base of visitors;
- Port Authority revenue derived from new or alternative sources helps airlines maintain or even improves air access to the USVI during the difficult period in the airline industry;
- Port Authority intervention in coordination of the airlines, TSA, INS, and Customs will improve passenger processing and in turn make their arrival and departures hassle-free;
- Incentives, if implemented equitably, might provide needed stimulus to enhance air operations at St. Croix.

VII. AIR SERVICE OPPORTUNITIES ANALYSIS

A. Introduction

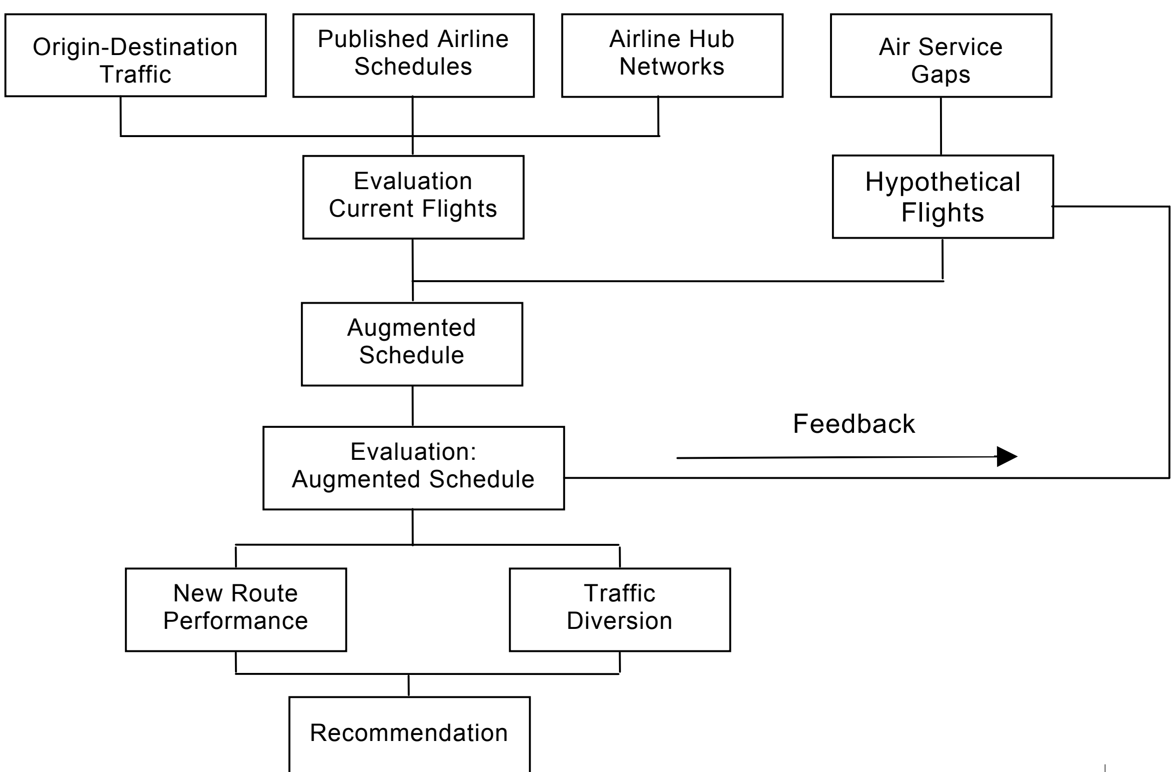
A program to increase air arrivals to the Virgin Islands must address both the *demand* and the *supply* for air services. Demand-based strategies encourage more people to fly to the Islands, through making them more appealing destinations, and publicizing their assets to prospective visitors. Supply-based strategies focus on the quality and quantity of air services, by attracting new carriers, routes and capacity. Supply and demand must be in balance for the airlines to make sufficient profits and for the Virgin Islands to obtain the capacity it needs.

This section summarizes an evaluation of the **supply** of air services. It identifies the short and long term prospects for new services to St. Thomas and St. Croix. Its findings are based on an analysis of traffic and airline networks. The objective of the chapter is to identify, for St. Thomas and St. Croix, those air service improvements that provide the largest incremental value over the services already available. A description of the methodology follows.

B. Route Evaluation Methodology

Exhibit VII-1 displays the methodology for evaluating new domestic routes from St. Thomas and St. Croix.

Exhibit VII-1. EK Route Evaluation Methodology



The evaluation followed multiple steps:

- A file of the over 800 U.S. and international destinations for passengers from St. Croix and St. Thomas was assembled from the Department of Transportation's origin-destination Database 1B;
- A file containing approximately 35,000 flights was assembled from the Official Airline Guide's databases. This database includes the flights of every U.S. carrier currently serves Virgin Islands or was considered a future prospect. The database includes an exhaustive list of flights connecting at each airline's hubs that could or might conceivably be part of a multi-flight itinerary to or from the two airports in the Virgin Islands.
- An evaluation of airline hub networks identified the routings each airline might employ in carrying passengers traveling to or from the Virgin Islands. This results of this analysis provided instructions to a computer algorithm on how to construct feasible, relatively direct and attractive connections.
- A computer algorithm examined each origin-destination city-pair in turn and determined feasible routings from the schedule. It searched the schedule and constructed feasible nonstop, 1-stop and two-stop routings, in a way that is very similar to that of a computer reservations system. It allows interline connections, but only between carriers belonging to the same "family" (e.g. Star Alliance), or those having a relevant pro-rate agreement. These itineraries included both existing and proposed services. The model followed all constraints for minimum connecting times at intermediate airports.
- The model examined all feasible connections and discarded those that were inefficient (i.e. it will discard a potential routing if it can find a second routing within the same airline family that offers the same or later departure time with the same or earlier arrival time.
- It assigned a score to each potential itinerary according to the "Quality of Service Index" (QSI) methodology. This considers the flight frequency, capacity of the smallest aircraft in the itinerary, number of enroute stops, number of connections, type of aircraft and elapsed time.
- The model allocated the traffic of each city-pair to the various itineraries according to their QSI scores.
- The allocations to each flight serving the Virgin Islands provided a benchmark on which the proposed air service improvements would be evaluated.
- Current services to and from St. Croix and St. Thomas were examined in order to determine geographical areas currently poorly served or airlines that might be interested in initiating services. For each of these preliminary "air service gaps," a series of potential new services and the carriers best able to operate them were identified. These proposals would be subject to a more detailed evaluation.
- For each possible new route, a hypothetical flight schedule was developed specifying the operating airline, flight timings and aircraft capacities.
- These hypothetical services were incorporated into the base schedule, and the allocation model was rerun.
- If the proposed services performed poorly, by capturing limited traffic, the model would readjust their timings and repeat the preceding steps.
- Once the correct timings were determined, a final run produced a detailed report on carrier market shares by city-pair. These results were adjusted to eliminate any city-pairs which appeared inappropriate, such as those involving excessively circuitous itineraries.

- For each flight, the model would examine the number of passengers it carried and its impact on incumbent services. A new route would only be recommended if it could carry sufficient traffic to be profitable, while not unduly harming any existing services.

This methodology was applied to 11 candidate routes. The prospective services to be examined were chosen so as to best complement the existing routes; adding new airlines, nonstop destinations, or serving new regions besides the well developed east coast markets.

C. Findings of Domestic Route Evaluations

Exhibit VII-2 displays the results of the route analysis.

Exhibit VII-2. Results of Route Analysis

VI Airport	Mainland Hub	Airline	Aircraft	Seats	Passengers/Day Each Way	Load Factor
St. Thomas	Dallas/Fort Worth	American	737-800	134	96.76	72.20%
St. Thomas	Memphis	Northwest	A-319	124	86.09	69.42%
St. Thomas	Detroit	Northwest	A-319	124	90.11	72.67%
St. Thomas	Houston	Continental	737-700	124	80.73	65.10%
St. Thomas	New York	JetBlue	A-320	150		
St. Thomas	Chicago Midway	ATA	737-800	175	79.84	45.62%
St. Croix	Charlotte*	US Airways	A-319	120	5.87	4.89%
St. Croix	Atlanta	Delta	737-800	154	8.69	5.64%
St. Croix	Dallas/Fort Worth	American	737-800	134	6.58	4.91%
St. Croix	Newark	Continental	737-700	124	5.65	4.56%

* Service currently operates on a Saturday-only basis

The analysis considers traffic and scheduling issues only. However, runway constraints at the Cyril E. King Airport limit nonstop flying distances and payloads. The proposed St. Thomas routes lie outside the economical range of most aircraft. A more detailed feasibility analysis would consider serving St. Thomas in conjunction with San Juan, St. Croix or another destination. It would examine revenues from the other airport and the relatively large expenses of flying short sectors.

The routes to Chicago, Dallas/Fort Worth, Detroit and Memphis would stimulate traffic from the small but growing markets in the Midwest and western states. ATA was selected as a candidate because it is a low fare airline focusing on leisure traffic. It has operated charter flights to the Virgin Islands. Of all low fare airlines, it is the most likely to begin regular services. Northwest and America West are the only network airlines not serving the Virgin Islands. While America West inaugurated services to Cancun in the Spring of 2003, it remains absent from the eastern Caribbean. Northwest serves the Cayman Islands, Nassau, San Juan, Puerto Plata and Punta Cana, with some destinations served on a seasonal basis. It is arguably the strongest candidate. Although Sun County has served St. Thomas seasonally, its network is very limited. Spirit Airlines, a low fare airline, recently inaugurated San Juan-Orlando services, and is a further candidate to serve the Islands. However, its network is very limited, and it would be unable to serve much of the very fragmented Virgin Islands-mainland traffic.

Section IV showed that the current air services to St. Thomas and St. Croix could already accommodate a traffic increase. Load factors and average fares show that the supply of lift to the Islands does not pose a constraint.

D. Developing St. Croix or St. Thomas as a Hub for the Caribbean

Businesses and legislators on the Virgin Islands have expressed a recurring interest in establishing an airline hub at St. Thomas or St. Croix. This hub would have spokes to several Caribbean islands, including Anguilla, St. Maarten, St. Barts and the British Virgin Islands. While intended to serve primarily transiting traffic, the hub would also stimulate originating and terminating traffic. It is the latter traffic that, as persons transacting business on the Islands, or as tourists, provides the largest economic benefits.

In 1999, the concept of a hub was explored in depth[23]. The report concluded that the concept is feasible, with sufficient traffic to support a profitable service.

By feeding long haul services, the proposed hub would increase the financial health of existing links and possibly support altogether new flights. Through helping the viability of long haul flights, raising the profile of the Virgin Islands, providing additional revenue sources to the airports, and promoting origin-destination traffic, the concept could promote the goal of increasing air arrivals and provide significant benefits to the economy.

Despite these benefits, the EK Team does not endorse the hub *as a means to increase air arrivals to the Virgin Islands*. Rather, the concept should be either promoted or discarded on its commercial merits and its economic benefits to the Islands. The concept's role in increasing air arrivals is certainly an important part of the economic spinoffs, and should be weighted accordingly. However, the hub strategy should not be pursued as part of the specific initiatives recommended in this study. The rationale is as follows:

- Commercial aviation is very risky, and exceptionally hostile to startups. A new airline requires a substantial cash reserve. The venture's business plan would address these factors, presumably to the satisfaction of investors. However, the high level of risk is undeniable, and, we believe, excessive for *the stakeholders of this study*.
- The hub would compete with several carriers, including American Airlines at San Juan. American has an extensive network to the Caribbean, and on May 15 2003 extended services to Nevis. It will defend its Caribbean franchise aggressively.

[23] "Review of USVI Air Service and Potential for the Future Regional Airline Plan", Kiehl Hendrickson Group, May 1999

- The hub may involve facilitation problems. For example, passengers transferring from inbound flights from the Caribbean to services to the U.S. would under the current configuration be required to pass U.S. entry facilities twice.
- Passengers prefer nonstop services. As shown in Section IV, nonstop flights between the U.S. mainland and the Caribbean have been growing. One example is US Airways' nonstop Philadelphia-St. Kitt's service. Although such services in the long run will promote a wider interest in the Caribbean, and indirectly promote intra-Caribbean services, in the short run they will divert traffic from prospective hubs.

E. Long Haul International Services

The Virgin Islands has only begun to tap the large leisure markets of Europe. In 2001, this segment comprised only 1.5% of the Islands' hotel registrations[24], in contrast to 15.5% for Cancun and 48.7% for Barbados. The Virgin Islands ranked the very lowest among all areas mentioned by the Caribbean Tourism Association. The Islands' past links with Europe and their historical and ecological attractions suggest that a stronger performance is in order.

For European markets, air services are clearly a constraint. Commercial airline schedules do not serve St. Croix/St Thomas-Europe passengers well. Most services leave the U.S. mainland in the morning (inbound trans Atlantic flights arrive in the evening, necessitating a stay in a hotel), and the return flights arrive from the Virgin Islands at their hubs in the mid-evening, missing many trans Atlantic departures by a few hours. The four exceptions to this pattern, providing layover-free connections to and from Europe, are an American-Iberia[25] link to Madrid via San Juan, American's late evening arrival/morning departure St. Thomas-Miami flight, a LIAT-Air France/KLM connection at St. Maarten and a LIAT-British Airways connection to London via Antigua. Except for the San Juan-Madrid connection, these options are available only to passengers from St. Thomas.

Most international traffic from St. Croix and St. Thomas travels via domestic flights to San Juan and the U.S. mainland. As shown previously, this traffic has grown significantly faster than domestic travel in spite of the poor air services. Vacation traffic between Europe and the Caribbean is large and growing quickly, especially to Cuba, the Dominican Republic, St. Maarten and Barbados[26]. The outlook for further growth is excellent. Between 2002 and 2003, the trade-weighted value of the U.S. dollar fell by 11.5%[27], making U.S. travel cheaper for the rest of the world.

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[24] Source: Caribbean Tourism Statistical Report, 2001-2002, Caribbean Tourism Organization, Barbados (2003)
[25] American and Iberia are closely allied through the OneWorld alliance. Their connections offer many of the advantages of a single-airline connection, such as attractive joint fares.
[26] Source: Caribbean Tourism Statistical Report
[27] Source: The Economist, May 3 2003

In the long term (5-10 years), the recommended goal for the Virgin Islands would be to obtain scheduled services to Europe. It would do so by a series of incremental steps. The immediate goal would be to obtain a limited series of trans Atlantic charter flights. At the outset, the flights would serve the Islands in conjunction with other Caribbean destinations, such as St. Maarten, Cancun, Belize or the Dominican Republic. Only a portion of the passengers on the aircraft would board or debark in the Islands. The hotel infrastructure, especially in St. Croix, would have difficulty accommodating a full planeload of visitors arriving at one time. While most European-Caribbean flights operate on a simple nonstop out-and-back basis, some serve more than one Caribbean point. Such services would be the immediate target. The charter flights would be operated by carriers such as Air 2000, Britannia, Monarch, Thomas Cook Flug (aka Condor) and LTU.

The packaged tour wholesalers in the United Kingdom and Europe would be crucial to developing charter services. These organizations assemble and distribute tour packages that include air transportation. To the fullest extent possible, they purchase seats in bulk on scheduled operators. They use charter airlines (some owned by the wholesalers themselves) if scheduled services are not available. The charter airlines arrange the operational details of their flights, but otherwise exercise no autonomy in the routes they serve. Since charter services are governed by country-of-origin rules[28], restrictive bilateral agreements such as that between the United States do not pose a constraint. The Cyril E. King Airport has accommodated low frequency charter flights from the United Kingdom.

It is recommended that the Virgin Islands target European charter operators, and seek weekly services. They could serve as a precursor to scheduled services. The runway at St. Croix's Henry E. Rohlsen Airport, recently lengthened to 10,000', could accommodate departures to Europe with no payload penalties. The Cyril E. King Airport at St. Thomas could serve inbound flights from Europe, although outbound operations would have to stop at another Caribbean airport with a longer runway.

F. Services to Canada

Canada is a second potential international destination. The Virgin Islands has only a 0.3% share of the Caribbean's tourist arrivals from Canada. Canada-Caribbean traffic will benefit from the recent appreciation of the Canadian dollar, rising incomes in Canada and the reliably harsh Canadian winter. Canadians are fully familiar, and fascinated with, the United States, but are almost totally oblivious to the Virgin Islands. St. Thomas/St. John and St. Croix could therefore offer a mix of exoticism and familiarity.

Air Canada has had a long presence in the Caribbean, and presently serves Haiti, the Bahamas, Bermuda, Barbados, Antigua, St. Lucia Trinidad and other destinations in the region. It operates a seasonal service to San Juan and has recently inaugurated flights to Grand Cayman. Many of its Caribbean services operate only

[28] Charter flights customarily traffic originating in and returning to one nation, and are an integral part of a larger package of services purchased. They are usually viewed as being under the exclusive purview of the nation of origin. The country of origin therefore stipulates the rules under which they operate, such as advance purchase requirements, membership in an affinity group, whether one flight can carry more than one such group, etc.

during the weekends, using equipment assigned to domestic services during the weekdays. Since these aircraft would otherwise remain idle, the airline's incremental costs of serving the Caribbean are relatively small. Air TransAt is also active in the Caribbean and has served San Juan. American, Delta, US Airways and Continental offer reasonably direct one-stop services to the key Montreal and Toronto markets.

Because of the more developed tourism infrastructure and the larger traffic volumes, charter or scheduled flights to Canada would likely operate only from St. Thomas, at least at the outset. However, the runway at the Cyril E. King Airport cannot accommodate nonstop flights to Canada without large payload penalties. It would therefore be necessary to serve St. Thomas in conjunction with another Caribbean destination. San Juan would be ideal, since the southbound flight could undergo preclearance in Canada.[29]

The key elements to developing a Canada-Virgin Islands service include:

- Working with travel wholesalers and receptive operators to develop appropriate leisure tour products;
- Promoting the Virgin Islands as a destination in Canada, especially in the key southern Ontario market; and
- Meetings with Air Canada and Air TransAt to indicate interest, propose the economic rationale for a service, and establish lines of communication.

G. St. Croix Technical Stops Program

Manufacturers have steadily increased the range of commercial airplanes. Recent technological advances have permitted ultra-long routes such as New York-Hong Kong, Los Angeles-Sydney and London-Singapore to obtain nonstop services. Such trends are not confined to large intercontinental aircraft. Later versions of the 737 see extensive use on transcontinental, trans Atlantic, and mainland-Hawaii services, allowing many "long and thin" markets to obtain nonstop services.
These advances mean that airlines seldom make purely technical stops. This has dramatically reduced long haul activity at many airports in Hawaii, Alaska and elsewhere. Nevertheless, there will remain a need for occasional technical on long overwater flights. Such stops could allow airlines to carry heavier payloads and rotate their crews more effectively. The economics of such stops would benefit if the airlines are allowed to serve revenue traffic. Several considerations could make a transit facility at St. Croix attractive:

- The facility could serve U.S.-Africa and Europe-Central America/South America services. It would be especially valuable to charter flights serving non-traditional destinations in the Caribbean, which are still unable to generate a full planeload of traffic;
- The United States has liberal bilateral agreements with most European nations, the major exception being the United Kingdom. Even with the U.K., revenue

[29] Passengers flying from major Canadian airports to the United States must clear U.S. entry formalities in Canada. A Toronto-St. Thomas-San Juan flight could benefit from this service; a Toronto-St. Thomas-St. Maarten flight or any other serving a third country could not.

services would be permitted to all airports except Heathrow and Gatwick airports. The stops would therefore generate revenues;
- The services would be operated mostly by widebody aircraft, and could offer attractive cargo capabilities;
- The U.S. federal inspections services could be used to preclear flights operating to the United States; and
- The airport's proximity to the Hovensa refinery might permit it to sell jet fuel at a relatively low price. This would be a strong inducement for operators of charter flights;

Other airports have successfully developed services for technical and transit stops. Bangor, Maine is an active enroute stop for trans Atlantic flights. It has U.S. federal inspections facilities for incoming flights and actively solicits stopover passengers. Gander, Canada, has an active and successful "Trans Oceanic Plane Stops" program. Anchorage and Fairbanks, Alaska serve many all-cargo services, and some passenger flights to Taipei. Ilha da Sol, in the Cape Verde Islands, accommodates Africa-United States passenger flights.

A reasonable target would be one or two weekly stopover flights during the peak winter season. It would require the following:

- Equipping a transit lounge with appropriate facilities and concessions;
- Ensuring that the airport has suitable ground equipment for the flight. This would include a mechanized loader for baggage containers;
- Obtaining the active support of a handling agent at the airport. This agent would work with airport management, U.S. federal inspections services and freight forwarders to perform much of the paperwork for processing the transit flights;
- Obtaining U.S. Federal Inspections Services support, should the operation involve revenue passenger arrivals, or preclearance of flights to the mainland;
- Obtaining commitments by freight forwarders to process inbound or outbound cargo for the flights. A cooperative forwarder would then work with the operator of each flight;
- Ascertaining the possibilities for selling discounted jet fuel to the transit flights and other flights serving the Airport;
- Obtaining DOT cooperation and regulatory clearance for any international arrivals or departures;
- Developing a schedule of attractive user fees transit stop flights;
- Publicizing the service among scheduled and charter airlines and tour wholesalers.

VIII. RECOMMENDED AIR SERVICE MARKETING AND DEVELOPMENT STRATEGIES

A. Introduction

A structured, current, and comprehensive air service marketing and development program is a competitive necessity in today's economic environment. In the case of the USVI, a territory whose economy is so heavily dependent on the tourism industry, it is particularly critical. The strategies outlined below provide a "road map" and prioritized action plan, for both the near and long term, which, if professionally executed in a timely manner, will ensure optimization of air arrivals to STT and STX.

Furthermore, the adoption and implementation of the plan will:

- optimize the effectiveness of marketing dollars;
- facilitate consistency of management in the long term;
- provide a framework for continuity, knowledge build up and professional development of VI staff;
- enhance the relationship and instill a sense of partnership between airport management and the airlines; and
- ensure the highest level of customer service and vacation experience.

The previous sections of this report have examined the economic and social context within which the Virgin Islands must operate to increase its air arrivals. The air transportation issues facing the Islands are the products of its geography, economic base, political institutions, the economic fundamentals of the airline industry, and the volatile and difficult environment faced by the airlines. This chapter builds upon these findings to propose strategies for the Virgin Islands to increase air arrivals.

B. The Need for Strategies for Each Island

The strategies for increasing air arrivals, while implemented by a single group of persons, and addressing needs of the Virgin Islands as a whole, must address the distinct needs of the two major airports. No single, and all-encompassing set of recommendations would be appropriate for both. St. Thomas/St. John and St. Croix possess different issues. The Cyril E. King Airport at St. Thomas is best positioned as:

- It is the gateway to the most populous, and most economically active parts of the Virgin Islands;
- It is the gateway to the renowned tourist resorts and the national park on St. John;
- Its catchment area boasts many excellent hotels and upscale resorts;

- Many prospective visitors are already familiar with St. Thomas through its prominent place as a cruise ship port;
- It is served by five network airlines nonstop to Puerto Rico and the U.S. mainland;
- It has high volume origin-destination markets to New York and Miami;
- It obtains charter and seasonal services by carriers such as Sun Country; and
- Its traffic has grown in the recent past; even its post-2000 contraction was milder than those of most airports.

In contrast, the Henry E. Rohlsen Airport on St. Croix faces several problems:

- The economy of St. Croix, while boasting a strong industrial base, lacks the strength, vitality and diversification of other Islands;
- Air traffic at St. Croix is only 36.78% of that at St. Thomas;
- The St. Croix Airport is served by only two large carriers, US Airways and American;
- American recently rationalized its staff at the Airport and now uses American Eagle employees to handle both commuter and mainline services;
- The US Airways service originates in St. Thomas and boards only a small share of its traffic in St. Croix. The short St. Thomas-St. Croix leg involves very high operating costs. This service should be considered at risk;
- The hotel infrastructure on St. Croix tends to be smaller and less developed than elsewhere in the Caribbean;
- The attractions of St. Croix; historical areas, climatic diversity, and opportunities for ecotourism; are different from what most people associate with the Virgin Islands. Those who visit the Islands are therefore somewhat unlikely to visit St. Croix; those who would most enjoy St. Croix are likely to go elsewhere in the Caribbean;
- Total air traffic at St. Croix has followed a lengthy period of decline. This resulted from decreased traffic to Puerto Rico. The post-2000 contraction of traffic was relatively severe;

The Airports also face different operating issues. St. Thomas Airport suffers from severe congestion during its mid-afternoon peak, and its runway strictly limits the feasible services. It already has nonstop scheduled flights to virtually all hubs on the mainland that are operationally feasible. The St. Croix airport has no congestion problem, and a 10,000’ runway. Its facilities pose no immediate constraints.

C. Recommended Strategies

Strategies for Immediate Implementation (1 month)

The following strategies should be pursued with urgency.

1. **Apply for Federal Assistance Under the Small Community Air Service Development Pilot Program**. The Small Community Air Service Development Pilot Program (Appendix M) provides communities with the funding to solicit improved air services. It covers market research, promotional funds, and the resources needed to solicit additional services. The FAA encourages communities to apply in groups, and limits the number in any state that may receive assistance. Each grant provides up to

$500,000. It is recommended that St. Thomas and St Croix jointly apply for this grant and share the proceeds equally. Each island would exercise the responsibility for using the funds, subject to the oversight of a single group comprising persons from both islands. The funds would be used to publicize each island as a tourist destination, and would support carriers now serving the Virgin Islands. Air service retention and increased traffic would be the goal.

2. **Develop Fees/Charges Incentives for Airlines now Serving the Islands.** The Virgin Islands Port Authority should explore any and all ways to offer temporarily lower user fees. Some form of assistance to incumbent airlines is appropriate given the stressed environment. The recent fee increase has sent harmful signals to the airline industry. It will likely result in further reduction of service. St. Croix is especially vulnerable. Airlines develop their winter schedules in the spring and early summer, and the recent fees hike will be reflected in their schedules for the winter of 2003/2004. The Port Authority's financial problems, and its limited room for action are recognized.

Strategies for Short Term Implementation (1-6 months)

3. **Assemble an Air Service Development Task Force.** It is essential that any and all efforts for marketing the Virgin Islands to the airlines be professional, coordinated, well structured, and creative. Parallel and uncoordinated efforts by different parties will be unsuccessful, counter-productive, and ultimately self-defeating. The Department of Tourism's efforts, and the Port Authority's growing participation in the marketing function have this potential.

   An air service task force should be assembled from representatives of the Port Authority, the Department of Tourism (or its replacement, the Tourism Authority) and St. Thomas/St. John and St. Croix. Who specifically manages the Task Force should be resolved locally, but it is essential that this person have the authority and responsibility for the Air Service Development Program.

   The Task Force would receive input from the Tourism Department, the Port Authority, chambers of commerce, hotel associations and other parties. It would set priorities, supervise its resources, and actively manage all aspects of air service recruitment. It would manage an ongoing process of communication between the airlines and the community.

4. **Meet With Incumbent Airlines for Air Services Retention.** The Air Service Task Force should meet with airlines serving the Virgin Islands to encourage them to maintain and increase services. Some of the routes serving the Islands are at definite risk. The Task Force would prepare presentations on the economic rationale for continued services. The presentations would also propose new routes, while recognizing that the current economic climate makes this difficult. These meetings would enhance communications between the community and the airlines. They would send a clear signal to the airlines that they are welcome.

5. **Review Port Authority Costs, Rates and Charges.** Airlines are increasingly sensitive about airport fees and charges. High fees can

dramatically reduce carrier profits, and the industry already operates on very narrow margins. The Virgin Islands Port Authority should therefore review all aspects of its operations from the ground up with the goal of reducing costs. It must continue to manage the tightest cost control possible.

6. **Address Facilities Congestion at Cyril E. King Airport, St. Thomas.** The afternoon peak results in long lineups at security, outbound baggage claim and federal inspections services. The airlines are especially concerned about passengers missing outbound flights. The design of the terminal and the passenger flow patterns are largely fixed and cannot be easily changed. However, the Port Authority should work with the airlines, Transportation Security Administration and federal inspections services with the aim of shorter lineups and faster passenger flows. The airlines believe that simple and creative measures could be effective if all parties worked closely together to pursue this objective. The airlines believe that the airport management should play the lead role in encouraging all parties to resolve this problem.

7. **Seek Improvements in Service By United Airlines.** The short-term focus of the Task Force should target air service retention rather than attracting new capacity. However, targeting United's token service would be appropriate. United Airlines presently serves the Virgin Islands with weekend-only services to Washington and Chicago. Inbound services operate nonstop; outbound flights transit San Juan because of payload restrictions from St. Thomas. The Task Force should meet with United Airlines and encourage it to upgrade the service with additional frequencies. Additionally, the Task Force should propose that the flight serve St. Croix rather than San Juan.

Strategies for the Medium Term (6 months- 3 Years)

8. **Upgrade Tourism Promotion Strategies.** Strategies to increase airline capacity to the Virgin Islands will be most effective if accompanied by aggressive measures to stimulate interest in visiting them. This is especially true for St. Croix, which is a poorly known and appreciated destination and which does not conform to the prevailing attitudes about the Virgin Islands. Air services to St. Croix are struggling, and it faces a genuine risk of further losses of capacity. Its current services alone are readily able to serve a significantly increased flow of visitors, and this could be a prerequisite for their continued operation.

   It is therefore strongly recommended that the Department of Tourism (or the new Tourism Authority) continue and expand its promotion of the Virgin Islands. This cannot be overstressed. Furthermore, the promotional campaign should explicitly differentiate between the different Virgin Islands and communicate their unique attributes to prospective visitors. The objective would not be to "sell" the Virgin Islands; rather to promote St. Thomas, St. John and St. Croix. The airline interviews stressed the importance of promotion again and again.

   Additionally, the Department of Tourism could target the cruise traveler as a potential repeat customer and enhance their brief stay by taking steps to improve the attractiveness and aesthetics of the cruise arrival area. Efforts to upgrade the business areas around the cruise ports (e.g. pedestrian areas) will help in attracting future air visitors to the islands.

9. **Participate in Air Service Development Seminars and Fora.** The Task Force should invest in obtaining air service development expertise. Professional organizations such as the Airports Council International (ACI) and Association of American Airport Executives (AAAE) run regular seminars, training programs and meetings in air service development. These activities will help the Task Force obtain expertise, learn new techniques, and develop industry contacts.

10. **Seek Improved Services to the U.S. Mainland.** The Air Service Task Force would meet with incumbent and prospective carriers to seek new capacity, particularly new routes to the mainland. This step would only be launched after there is clear evidence of a recovery in the airline industry, or if traffic to and from the Islands is restored to its level of 2000. Specific targets from St. Thomas would include:

    - Northwest Airlines to Detroit or Memphis. Northwest is the largest network carrier not serving the Virgin Islands. The Task Force should originally target seasonal, weekend-only services, using aircraft idled by the weekly lull in domestic traffic.
    - JetBlue to New York. This carrier tends to serve only high volume routes. It is a "long shot" but is still worth consideration.
    - Spirit Airlines to Orlando
    - US Airways to Pittsburgh
    - Delta Airlines to Cincinnati
    - American TransAir to Chicago-Midway
    - Continental Airlines to Houston

    These services, to new hubs would help expose the Islands to growing markets in the Midwest, central and western states. Because of the runway limitations at St. Thomas, nonstop flights to these destinations may be infeasible. The flights would then serve St. Thomas in conjunction with existing routes to Puerto Rico or, ideally, St. Croix.

    Target routes from St. Croix would include

    - American to New York
    - An additional American Airlines flight to Miami
    - US Airways to Charlotte on a daily basis
    - Delta Airlines to Atlanta
    - Continental Airlines to Newark

    Current traffic to and from St. Croix is not sufficient to make a credible case for the above services on a standalone basis. At the outset, these proposals would depend on support from St. Thomas.

11. **Evaluate Revenue Guarantees for Services to St. Croix.** Many resorts use revenue guarantees to encourage new services. Hotels in both the Caribbean and in Colorado ski resorts often agree to guarantee flight loads.

Besides showing a tangible commitment to the services, these incentives discourage the community from seeking competing services.

Revenue guarantees would not be appropriate for St. Thomas. It already has several large and well-established services. However, revenue guarantees, offered by resorts on St. Croix, could be an effective means to attract improved services. Resort and hotel operators on St. Croix should be prepared to offer incentives, if these are necessary to attract additional services.

12. **Pursue Charter Services to the United Kingdom or Europe.** The Air Service Task Force would seek a low frequency charter service as a precursor to a scheduled flight. The Department of Tourism or Tourism Authority would meet with overseas travel wholesalers and their North American receptive operators to develop an attractive product including air transportation. The wholesaler would then assign a charter airline to operate the route.

13. **Pursue Scheduled or Charter Services to Canada.** This step would involve direct discussions with Air Canada, Air TransAt and their Caribbean tour wholesalers. It would emphasize the southern Ontario market.

14. **Develop an International Transit Product for St. Croix's Henry E. Rohlsen Airport.** The Port Authority would develop the St. Croix Airport to serve as a technical stop for trans oceanic traffic. The service would offer incentive landing fees and, if possible, low fuel prices. While the original emphasis of the plan would be purely for technical stops, the Authority, the Task Force and the Department of Tourism/Tourism Authority would develop products to appeal to tourists. The technical stops would become low volume revenue stops.

The recommended strategies – Immediate, Short-Term and Medium-Term and schematically presented in Exhibit VIII-1.

Exhibit VIII-1. Recommended Air Service Development Strategies and Implementation Program