SECTION B
INTERNATIONAL TRADE AND ECONOMIC DEVELOPMENT OPPORTUNITIES

A major undertaking of LATTS was the performance of a macro-scale study regarding the characteristics of existing trade patterns, particularly as they relate to Latin America and the members of the Southeastern Transportation Alliance. This was followed by another major undertaking which produced forecasts of future international trade volumes. Additionally, analyses were performed regarding tourism, business and service travel. Analyses also were undertaken to identify the economic impact upon the Alliance resulting from increased trade opportunities with Latin America.

HISTORICAL AND CURRENT TRADE PATTERNS

In response to a number of factors, Latin America is experiencing unprecedented economic growth. Study analyses revealed that:

- There is a sustained pattern of growth in trade between Latin America and the United States.
  - In recent times, the growth rate in trade has escalated above historical patterns.

- For a number of reasons, including its advantageous geographical relationship to Latin America, trade between the United States and Latin America tends to gateway in the Alliance Region (i.e., enter or leave the United States through the Region).
  - 86 percent of Latin America imports into the United States enter through the Alliance Region.
  - 71 percent of all U.S. exports to Latin America depart through the Alliance Region.

- Of the total Latin American trade gatewaying in the Region, 80 percent of the tonnage and 60 percent of the commodity value was seaborne trade.

- Trade crossing the Texas/Mexico border accounts for 20 percent of the tonnage and 38 percent of the value of gateway traffic.

- In relative terms, the smallest component of trade with Latin America enters or leaves the United States by air. Nevertheless, airborne freight is a very important element for certain commodities.

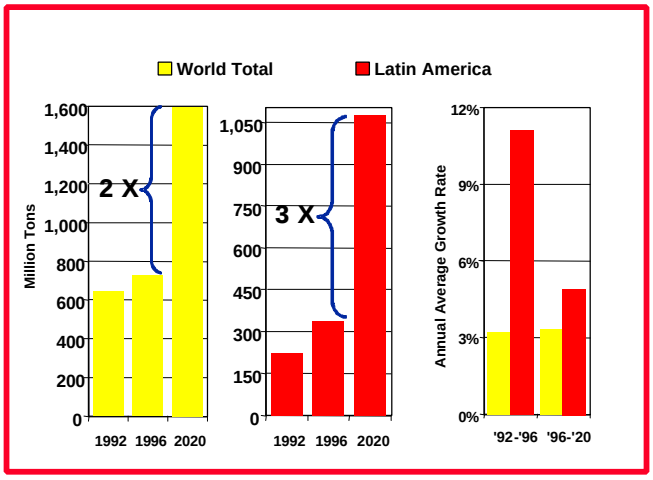
Trade Forecasts

Forecasts developed by the study clearly show that trade with Latin America will be even greater in the future, in both relative and absolute terms.

- As noted in **Exhibit B-1**, total international trade by the Alliance Region is expected to double by the year 2020.

- The Latin American component of total international trade is expected to triple during this time span.

Exhibit B-1
ALLIANCE TRADE GROWTH TRENDS: FORECASTS



These "Base Case" forecasts assume a continuation of recent trends and conditions until 2020. Nevertheless, there are significant events which could result in a "High Case" scenario. These events could include:

- Increased liberalization of trade, e.g. a Western Hemisphere Free Trade Agreement,

- Higher economic growth trends for Latin America and/or the United States, and

- Changes in U. S. policies regarding Cuba.

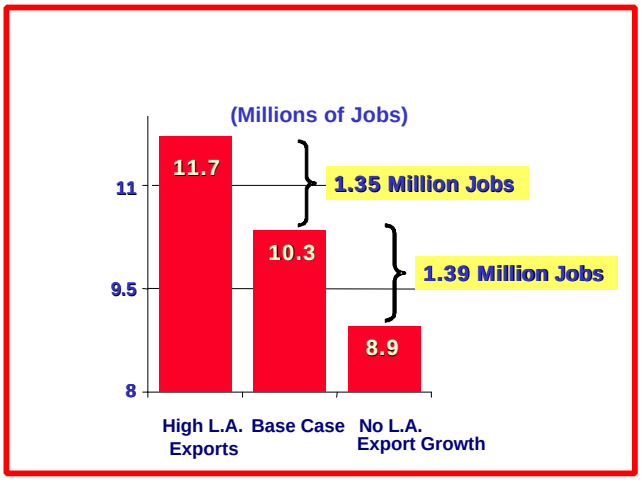
Under a "High Case" scenario, the volume of trade with Latin America through Southeast Alliance gateways is forecast to increase to 1.1 billion metric tons, more than 22 percent higher than the "Base Case" forecast for 2020.

Economic Development Impacts

Trade with Latin America leads to additional jobs for the people of the Southeast Alliance. Given the region's position in the Western Hemisphere's economy, these jobs are likely to be created in value-added industries and in the higher wage occupations within those industries. Using a system of

macroeconomic models, simulations have been undertaken to predict the impact of Latin American trade on the Alliance. Levels of Alliance employment were compared for the "Base Case" and the "High Case." To demonstrate the importance of Latin American trade upon job formation in the Alliance Region, these analyses also produced an estimate of employment levels if there were no growth in trade with Latin America. Results of these analyses are depicted in **Exhibit B-2**.

Exhibit B-2
CHANGE IN ALLIANCE EMPLOYMENT FROM 2000 TO 2020



- The "Base Case" growth scenario will result in 1.39 million additional jobs, i.e. jobs that are created through increased trade with Latin America under the "Base Case" assumptions.

- If the "High Case" growth scenario is realized, an additional 1.35 million jobs will be created in the Alliance Region.
  - That is, under the "High Case" growth scenario, there will be an additional 2.74 million jobs in the Alliance Region which are attributable to increased trade with Latin America.

SECTION B1
EXISTING TRADE FLOWS

Development of the information discussed in this report section was substantially completed during 1999 and the resulting database reflects the information available as of that time.

TRADE DATABASE

This component of the LATTS project, which had as its purpose the identification of current trade patterns between the United States (individual Alliance states, the Alliance Region and other U.S. regions) and Latin America, required the assembly of the LATTS trade database. This constituted a significant challenge because LATTS was the first known study to attempt to link international trade data with domestic production and consumption data. This process involved allocating international trade passing through international gateways (ports, airports and border posts) to individual U.S. states and Bureau of Economic Analysis (BEA) zones. For example, tracing the trade route of a widget exported through a Florida port to Brazil from Tennessee.

Different commodity and trade databases address different components of the commodity flow path. Some address the international segment – from a port to a country – while others address the domestic portion – from Tennessee to Florida. To assemble a master database that actually addresses the entire trade path required matching a variety of databases.

The major challenge was to link international trade databases with the domestic commodity flow databases, specifically for trade between the U.S. and Latin America which passes through (i.e., gateways in) the Alliance, including trade which originates and terminates within the Alliance. Because of their specific natures, linking the databases required a great deal of experience and knowledge in this specific field. At the very least, the databases and models used for this task are all similar in the sense that they contain economic and trade indicators for specific jurisdictions – states, counties, BEA's, countries – by industry and commodity group – for the past, present and future – for different modes of transportation. But that is where the commonality ends. The data characteristics vary from database to database. For example, some databases report data at a state level while others report at a BEA or county level. They also report data at different commodity detail levels. And a certain commodity/industry grouping in one database may not include the same mix of industries as a similar grouping in another database. Also, some of the databases used to define the domestic routing of commodities contained both international and domestic flows in an aggregate form, hence requiring alternative methods of identifying the international component within aggregate domestic flows.

Consequently, this effort required more than merely "cutting and dicing" data taken off the shelf and then producing reports. At the very least, it required a

great deal of data processing, an understanding of how the specific databases vary, the expertise to untangle data mismatches, and the capacity to assemble a larger customized database. The results of this effort provided the basis for this section of the report.

THREE INTERNATIONAL TRADE COMPONENTS

There are three international trade components (see **Exhibit B1-1**) for which data was collected, each from different sources:

- International seaborne trade;
  Source: Journal of Commerce's Port Import Export Reporting Service ("PIERS").

- International cross-border trade with Mexico;
  Source: Bureau of Transportation Statistics' Transborder Surface Freight Database.

- International air cargo trade;
  Sources: U.S. imports and exports for selected airport codes, Department of Commerce, Bureau of the Census; and Trade with U.S. Possessions, Annual EA695, Department of Commerce, Bureau of the Census.

Exhibit B1-1
THREE INTERNATIONAL TRADE COMPONENTS

For all three of these categories, the data addresses the flow for trade through U.S. gateways (seaports, border posts and airports) where international shipments are cleared. During the clearance process, a range of information about the shipments is collected, the most useful and accurate of which is information about the nature of the shipment as well as the international origin/destination. This information was used to trace the international trade patterns for individual industry sectors.

Also collected during the clearance process, specifically for the seatrade and cross-border trade, is information about the U.S. shipper/receiver, including their domestic location. Conceptually, this information about the domestic origin/destination could be useful in tracing international trade domestically, to and from U.S. locations of origin and destination. However, this domestic data component was found to have a significantly high level of error. For example, shippers commonly identify the address of the respective company headquarters as the point of origin/destination, rather than the actual production plant. Grain from Iowa shipped down the Mississippi River system through the port of New Orleans to Brazil may actually be shown as being shipped from New York where the shipper was headquartered. In other cases, no address is provided in this database. Although this problem of arbitrary reporting was not universal to all industry sectors, it was found that these international databases could not be used alone to accurately trace the domestic routing of international trade. Hence, an approach was undertaken which involved supplementing domestic reporting components of the international trade databases with other data sources, namely:

- Reebie TRANSEARCH data.
- 1993 Commodity Flow Survey, Department of Commerce/Bureau of the Census.
- Standard & Poor's DRI U.S. Regional Economic Service.

All three of these data sources were used to help define the domestic production and consumption and related flow patterns for commodities which were characteristic of Latin American trade. It is important to note that while the international trade routing portion (between ports/airports/border-posts and foreign origin/destinations) was based primarily upon shipper declarations, the domestic routing portion, though somewhat based upon declarations where available, was supplemented by other data sources and models. The method of supplementing the declarations of domestic origins/destinations identified the most plausible domestic routing and allocation of international trade. To accomplish this, the domestic allocation process went through a series of progressive adjustments and refinements. For example, one of the early observations made during internal reviews was that the domestic allocation process had a bias toward the gateway states. In other words, the gateway states were shown to produce/consume an unusually high percentage of the trade passing through them. For some sectors like petroleum (crude & refined) which is shipped primarily through ports in Texas and Louisiana, the largest share was shown to be predominantly produced and consumed in those two states. This is actually plausible since these two states have a strong local base in those industries. However, in general, especially for merchandise and

industrial goods, the gateway state bias was beyond plausible. Hence, DRI's U.S. Regional Economic Service was used in combination with Reebie's TRANSEARCH data and the 1993 Commodity Flow Survey data, to adjust for the bias.

LATTS TRADE DATABASE

One of the challenges of undertaking a study of this nature was the sheer magnitude of data which was analyzed. At the database level, LATTS studied trade between 112 specific U.S. entities (76 Alliance state BEA's, Puerto Rico, and 35 non-Alliance states) and 23 foreign entities (19 Latin American, and 4 other world regions), through 101 gateways (ports/border-posts/states), for 32 different commodity groups, by 3 international modes and 6 domestic modes, over a space of 5 previous years (1992-1996). From a mathematical standpoint, the combinations ran into the millions, making it very impractical to report findings at this level of detail.

Hence, for purposes of discussing trade patterns in this report, the U.S. was broken into five major regions; the Alliance, the Southwest, the Northwest, the Central and the North Atlantic states. The states included in each region are shown in **Exhibit B1-2**. The non-Alliance states were addressed on a regional basis, while the trade patterns for each of the Alliance states and Puerto Rico were identified individually.

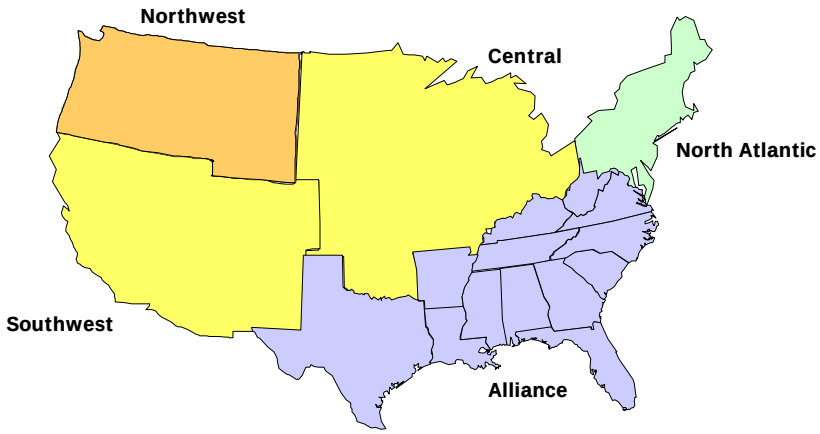
In a similar manner, Latin America was grouped into 19 individual entities, the majority of which are individual countries, while several of the smaller countries were combined into groups, as shown in **Exhibit B1-3**.

In addition to the 19 Latin American data regions shown above, there are four additional international data regions for which the database identified trade with the U.S.: Asia, Europe, Canada and the Rest of World. However, in this report, to simplify the task of reporting non-Latin American international trade, these four regions were combined into a single Rest of World category.

COMMODITY SECTORS

For this study, the Standard Transportation Commodity Code (STCC) classification system was used, specifically at the 2-digit level. **Exhibit B1-4** lists the commodities and their associated codes. In addition, for presentation purposes broader classifications are shown below. These classifications are intended to simulate material handling needs.

Exhibit B1-2
U.S. REGIONS FOR THE LATTS TRADE DATABASE



Northwest	Southwest	Central	North Atlantic	Alliance
Washington	California	North Dakota	Maine	Texas
Oregon	Nevada	South Dakota	New Hampshire	Arkansas
Idaho	Utah	Nebraska	Vermont	Louisiana
Montana	Colorado	Kansas	Massachusetts	Mississippi
Wyoming	Arizona	Oklahoma	Connecticut	Alabama
	New Mexico	Minnesota	Rhode Island	Georgia
		Iowa	New York	Florida
		Missouri	New Jersey	Kentucky
		Wisconsin	Pennsylvania	Tennessee
		Illinois	Maryland	South Carolina
		Michigan	Delaware	North Carolina
		Indiana		W. Virginia
		Ohio		Virginia
				Puerto Rico

Exhibit B1-3
LATIN AMERICAN DATA REGIONS

Exhibit B1-4
TWO DIGIT STCC COMMODITY GROUPS

LATTS Commodity Group	STCC2 Code	Commodity Description
Crude & Refined Resources	13	Crude Petroleum Or Natural Gas
	29	Petroleum Or Coal Products
Agricultural & Natural Resources	01	Farm Products
	08	Forest Products
	09	Fresh Fish Or Marine Products
	10	Metallic Ores
	11	Coal
	14	Nonmetallic Minerals
Primary Manufactured	27	Printed Matter
	28	Chemicals Or Allied Products
	32	Clay, Concrete,Glass Or Stone
	33	Primary Metal Products
Manufactured	19	Ordnance Or Accessories
	20	Food Or Kindred Products
	21	Tobacco Products
	22	Textile Mill Products
	23	Apparel Or Related Products
	24	Lumber Or Wood Products
	25	Furniture Or Fixtures
	26	Pulp, Paper Or Allied Products
	30	Rubber Or Misc Plastics
	31	Leather Or Leather Products
	34	Fabricated Metal Products
	35	Machinery
	36	Electrical Equipment
	37	Transportation Equipment
	38	Instrum, Photo Equip, Optical Eq
	39	Misc Manufacturing Products
Miscellaneous & Unknown	99	Unknown
	40	Waste Or Scrap Materials
	41	Misc Freight Shipments
	46	Misc Mixed Shipments

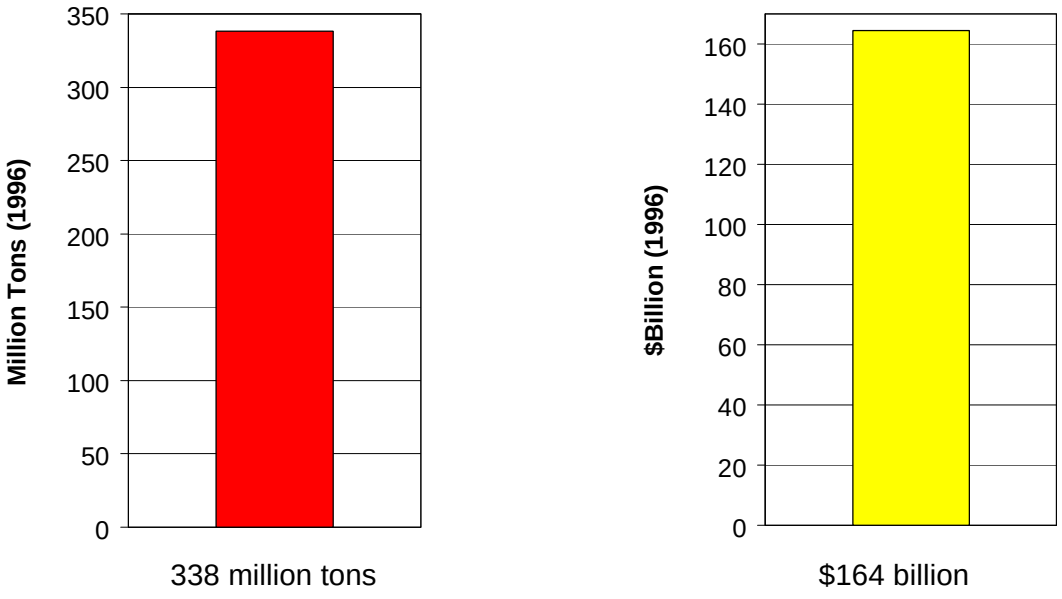
TRADE VOLUME MEASURES: TONNAGE VERSUS VALUE

The ultimate infrastructure investment strategies developed by this study were based, in part, on anticipated volumes of future trade with Latin America. The most useful measure in terms of identifying capital facilities and equipment needs associated with accommodating such trade is in terms of tons. For example, an annual tonnage throughput estimate of a certain commodity sector is useful in estimating the level of facilities and equipment to handle such throughput over the course of a year. Hence, the majority of the analysis in this report is in terms of tons (metric). However from a reporting standpoint, this presents a problem of bias toward bulk commodity sectors, specifically in the case of sea trade where the mix of commodities is dominated by bulk commodities (crude petroleum, grain, coal, etc). This skews the data toward trading partners, U.S. gateways, U.S. origins/destination and inland modes which are bulk intensive. Hence, the sea trade analysis in this report contains a 1996 dollar value based analysis to complement the tonnage analysis. On the other hand, the air cargo and cross-border Mexican trade components have a more diverse mix of commodities. Hence these categories were analyzed from a tonnage standpoint only.

TRADE SUMMARY

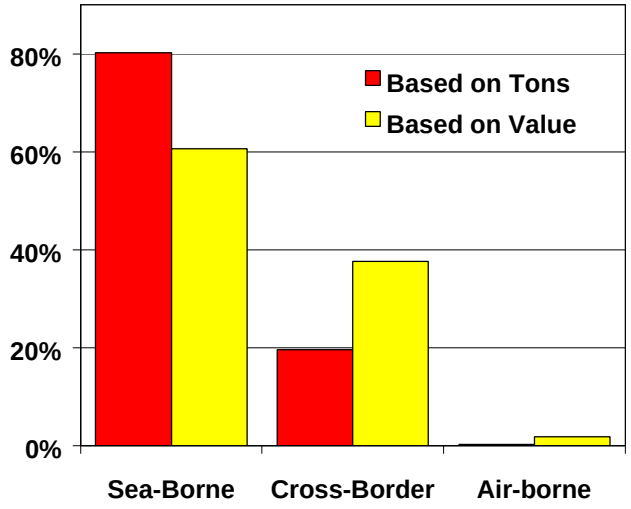
The total trade between the Southeastern Alliance and Latin America for 1996, measured in volume, was 338 million metric tons. In terms of value, trade between the two regions totaled $164 billion, as shown in **Exhibit B1-5**. Clearly, the trade relationship between the Alliance and Latin America is a substantial one—with implications for jobs, transportation infrastructure, and the general economies of both.

Exhibit B1-5
TOTAL ALLIANCE GATEWAY TRADE WITH LATIN AMERICA
Tons vs. Value (1996)



Measured by volume, gateway trade between the Alliance and Latin America is primarily transported by water, as depicted in **Exhibit B1-6**. In tons, 80% of trade is sea-borne, about 20% is cross-border, and only a small amount is carried by air. This volume of trade indicates that water related transportation infrastructure is crucial to growth in trade of bulk commodities between the regions.

Exhibit B1-6
TOTAL ALLIANCE GATEWAY TRADE WITH LATIN AMERICA – BY MODE



Measured in value, sea-borne trade is again the primary transport mode, but not by as large a margin. In dollars, 61% of trade is carried by water, 38% is cross-border, and about 2% is shipped by air.

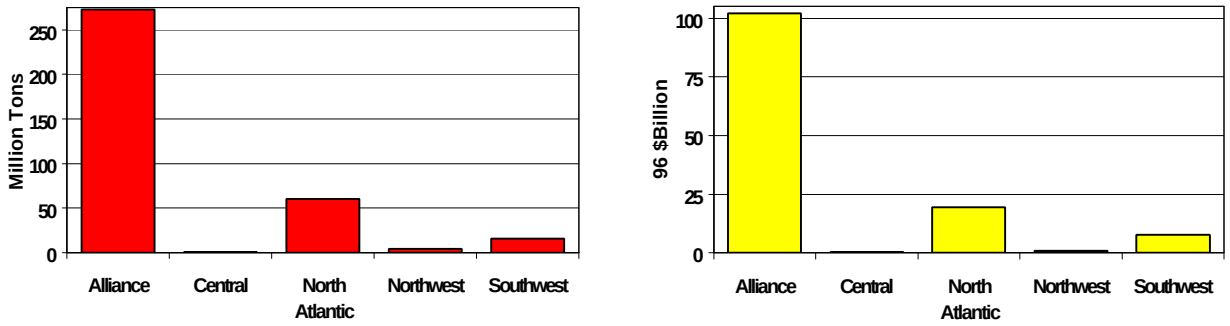
SEABORNE TRADE AND THE ALLIANCE REGION

Various characteristics of seaborne trade as it relates to the Alliance Region are summarized below.

Alliance as the U.S. Gateway to Latin America

In terms of U.S. regions, the Alliance is the largest trading gateway with Latin America measured by tons and by value. The Alliance was the gateway for 273 million tons of seatrade with Latin America in 1996, while the next closest region was the North Atlantic with just under 60 million tons. In terms of value, the Alliance's seatrade with Latin America totaled nearly $102 billion followed by the North Atlantic with $19.5 billion (**Exhibit B1-7**).

Exhibit B1-7
THE ALLIANCE IS THE GATEWAY TO LATIN AMERICA
1996 TOTAL SEATRADE WITH LATIN AMERICA



Latin American vs. Rest of the World Trade

Not only is the Alliance Region the major U.S. gateway for Latin American trade, Latin America is an important seaborne trade market for the Alliance Region itself. During 1996, 41 percent (27.3 million tons) of the over 662 million tons in U.S. seaborne trade which gatewayed through the Alliance Region's ports, was Latin American trade.

In addition to being an important gateway for U.S. trade with Latin America, the Alliance Region is the origin and destination for a considerable share of trade with Latin America. In 1996, an estimated 236 million tons of Latin American sea trade originated or terminated in the Alliance Region, compared to 308 million to and from the rest of the world.

The relationship between flows which gateway in the Alliance Region and either originated or are destined for the Region is illustrated in **Exhibit B1-8**. More Latin American trade gatewayed through the Alliance Region's ports than actually originated and terminated in the Alliance Region. For Latin America exports, the Alliance Region's ports were the gateway for 59.3 million tons compared to 36.2 million tons which originated from the Alliance Region. For Latin American imports, the Alliance Region's ports were a gateway for 213 million tons compared with 200 million tons terminating in the Alliance Region.

Seaborne Exports vs. Imports

The relationship between exports and imports is reversed when seaborne trade is measured in value of goods rather than tonnage. The Alliance was the gateway for a total of $102 billion worth of trade between the U.S. and Latin America in 1996. Of that total, exports from the U.S. to Latin America through the Alliance totaled $52 billion worth of goods transported by sea. Imports into the U.S. from Latin America were at $49 billion in value, as depicted in **Exhibit B1-9.**

Exhibit B1-8
THE ALLIANCE REGION AS A GATEWAY AND ORIGIN/DESTINATION FOR SEABORNE TRADE

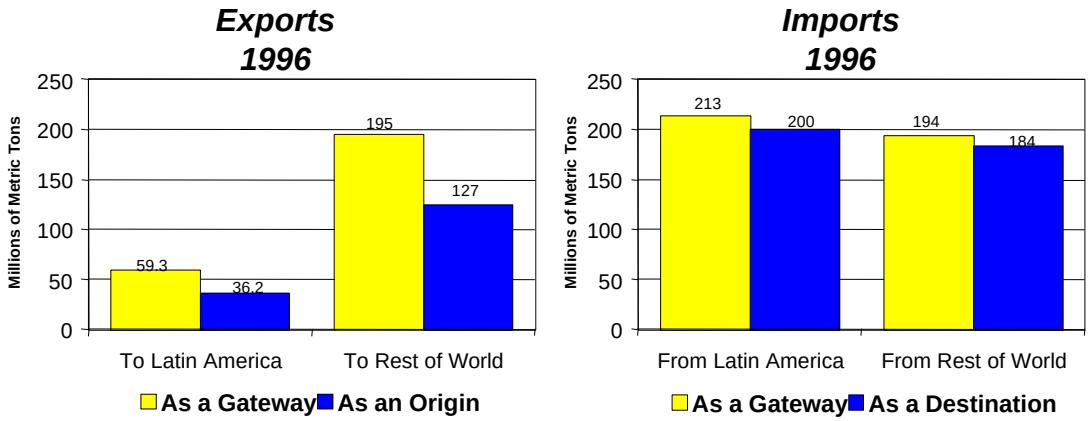
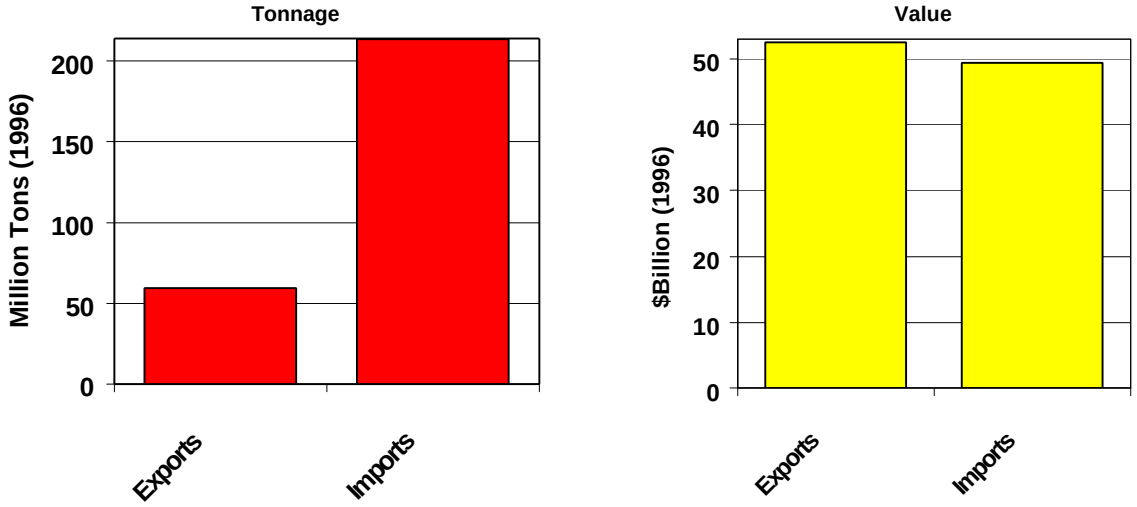


Exhibit B1-9
TOTAL ALLIANCE GATEWAY TRADE
1996 SEATRADE WITH LATIN AMERICA



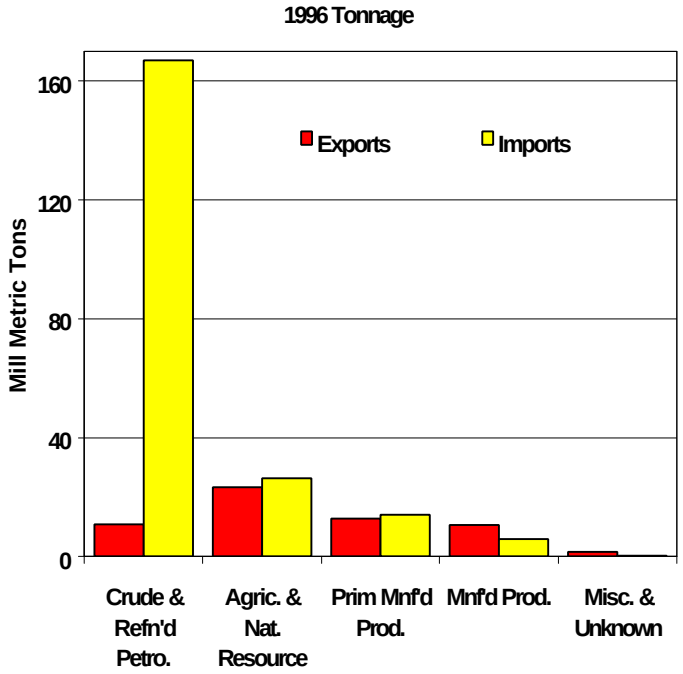
Seatrade Tonnage by Commodity Group

The largest Alliance gateway seatrade commodity group in terms of tonnage is Crude & Refined Petroleum, with 178 million tons in 1996. The U.S. sent 11 million tons of Crude & Refined Petroleum through the Alliance to Latin America, while 167 million tons were imported into the U.S. through Alliance gateways from Latin America (**Exhibit B1-10**). After Crude & Refined Petroleum, the largest volume commodity groups were as follows: Agricultural & Natural Resources, Primary Manufactured Products, Manufactured Products, and Miscellaneous and Unknown.

Agricultural & Natural Resources totaled 50 million tons of seatrade between the U.S. and Latin America in 1996 through the Alliance gateways. The U.S. exported approximately 23 million tons to Latin American nations by sea, while importing approximately 26 million tons from them using Alliance gateways.

Primary Manufactured Products trade using Alliance gateways amounted to 27 million tons—13 million tons of which was exported from the U.S. to Latin America, and 14 million tons were imported into the U.S. by sea. Over 16 million tons of seaborne Manufactured Products flowed through Alliance gateways. Exports from the U.S. to Latin America made up almost 11 million tons, while imports from Latin America totaled around 6 million tons. Finally, about 2 million tons of Miscellaneous & Unknown products were exported from the U.S. to Latin America via seatrade through Alliance gateways.

Exhibit B1-10
ALLIANCE SEATRADE WITH LATIN AMERICA
BY COMMODITY GROUP



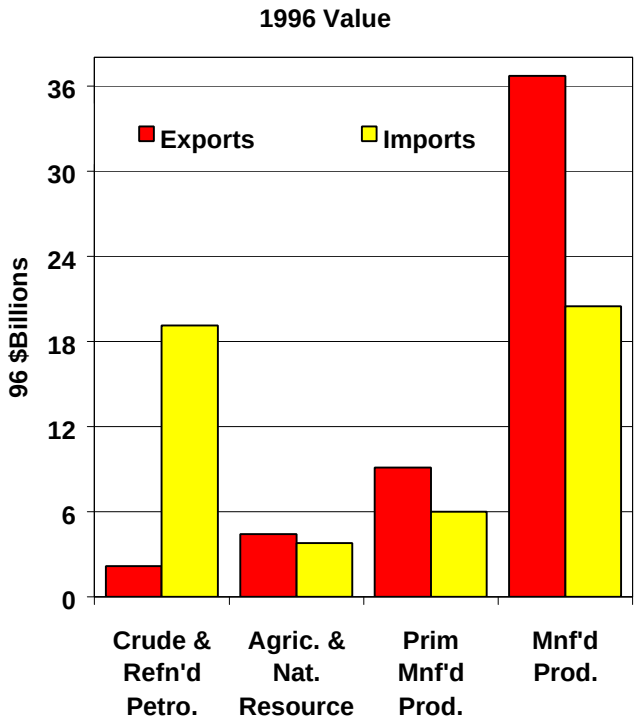
Seatrade Commodity Groups By Value

The gateway seatrade between the Alliance and Latin America, when measured in value, depicts an import/export relationship that is quite different from that shown by tonnages. In terms of value, the largest commodity group is Manufactured Products, with $57 billion in trade between the U.S. and Latin America using the Alliance as a gateway. Of that amount, $37 billion is accounted for by exports to Latin America from the U.S. (**Exhibit B1-11**).

Crude & Refined Petroleum follows Manufactured Products at $21 billion total, $19 billion of which is imported into the U.S. from Latin America. Primary Manufactured Products account for $15 billion, $9 billion of which is exported from the U.S. Another $8 billion comes from Agricultural & Natural Resources, roughly half being traded in each direction.

Combining the Primary Manufactured & Manufactured commodities, the U.S. exports $46 billion of $72 billion of the total trade occurring in those two commodity groups.

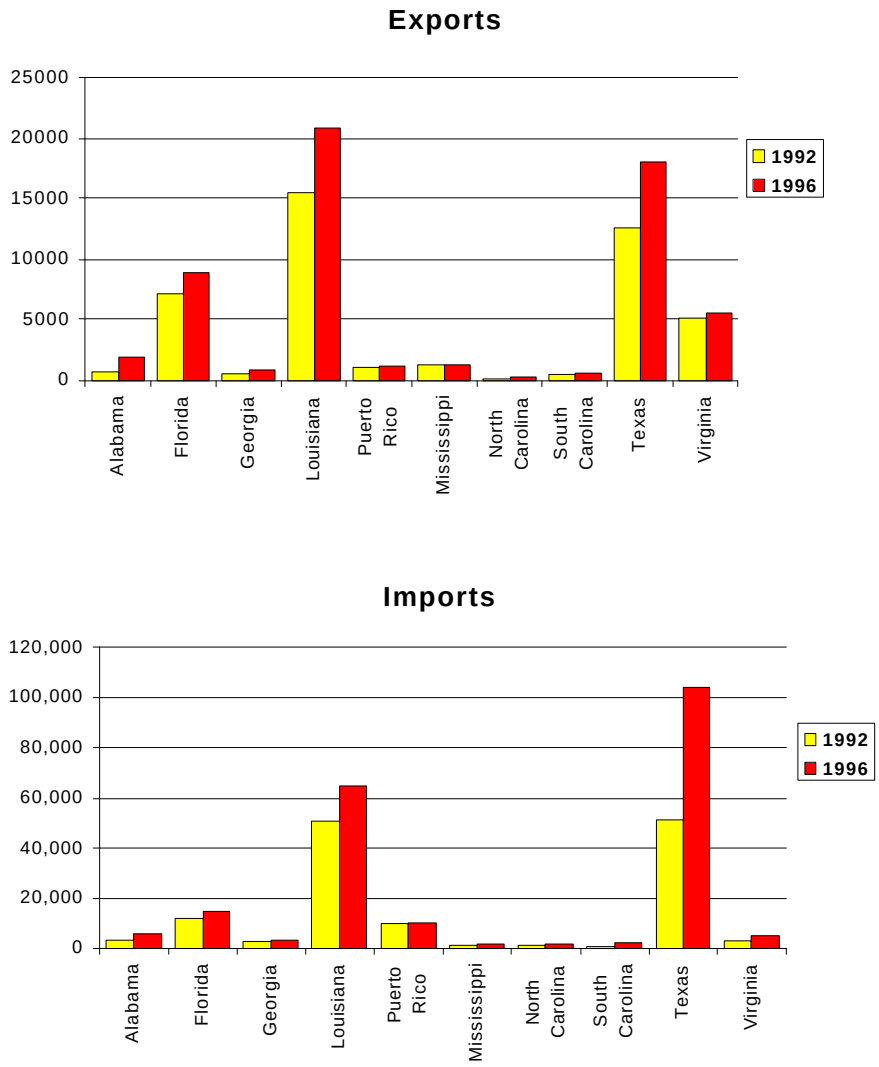
Exhibit B1-11
ALLIANCE SEATRADE WITH LATIN AMERICA
BY COMMODITY GROUP



Gateway States

Ten of the Alliance members have coastal ports and hence are defined as gateway states. There are big differences in the volumes of Latin American trade moving through different gateway states. Texas and Louisiana are by far the big players for imports, with Texas in 1996 at over twice Louisiana's volume. Moreover, Texas has also been growing most rapidly, not only in absolute terms, but in percentage terms as well. These two states are followed by Florida and, more distantly, by Alabama and Virginia. The same states stand out in exports as well, although Virginia is not far behind Florida, Louisiana and Texas are about even, and Alabama is less distinguished from the rest of the pack (**Exhibit B1-12**).

Exhibit B1-12
ALLIANCE GATEWAY STATES FOR LATIN AMERICAN SEATRADE
(Thousands of Tons)



The distribution of gateway seatrade varies significantly based on the mix of commodities, primarily due to the materials handling needs of various commodities. For example, bulk commodities such as farm products and coal require different materials handling equipment (silos, conveyors, ship loaders, etc.) than containerized commodities (gantry cranes, stackers, carriers, etc.), or liquid bulk commodities (storage tanks, pipelines, etc.). Moreover, ports tend to specialize in specific materials handling equipment and capacities, and hence attract specific commodity mixes consistent with their materials handling.

The following four exhibits (**Exhibits B1-13** through **B1-16**) show the 1996 tonnage distribution of Latin American Seatrade across the Alliance port gateways for four commodity groups: crude and refined petroleum products, agriculture and mined products, primary manufactured products, and manufactured commodities. Although there are some exceptions, crude and refined products tend to be of a liquid bulk nature, agriculture and mined product tend to be of a bulk nature, primary manufactured products tend to be of a bulk and/or break-bulk nature and manufactured goods tend to be containerizable, although there are some exceptions to that rule. It is clear from these maps that the distribution of Latin American trade varies by commodity group, primarily due to the port materials handling capabilities, as well as other factors such as market access, etc.

Exhibit B1-13
ALLIANCE PORT VOLUMES FOR LATIN AMERICAN TRADE
CRUDE AND REFINED PETROLEUM PRODUCTS

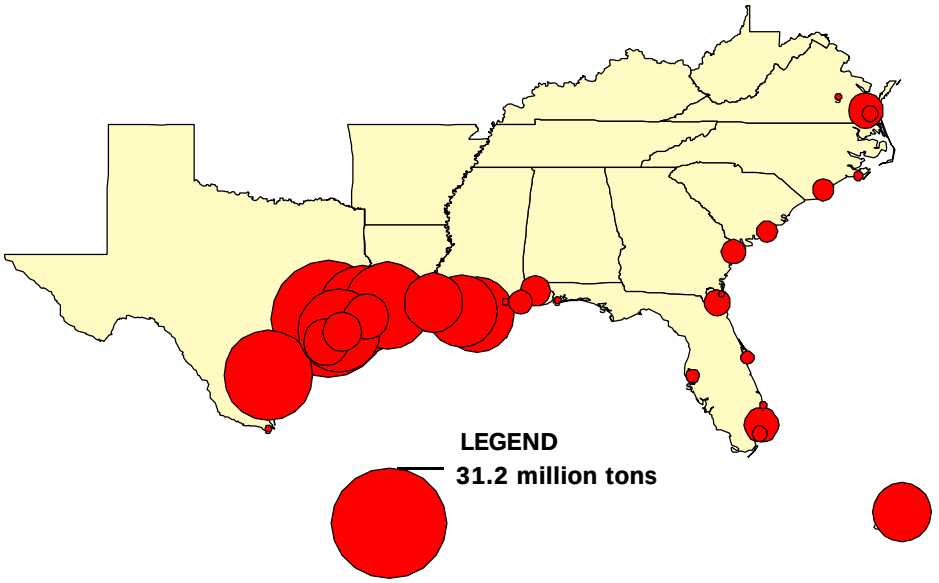


Exhibit B1-14
ALLIANCE PORT VOLUMES FOR LATIN AMERICAN TRADE
AGRICULTURAL AND MINED PRODUCTS

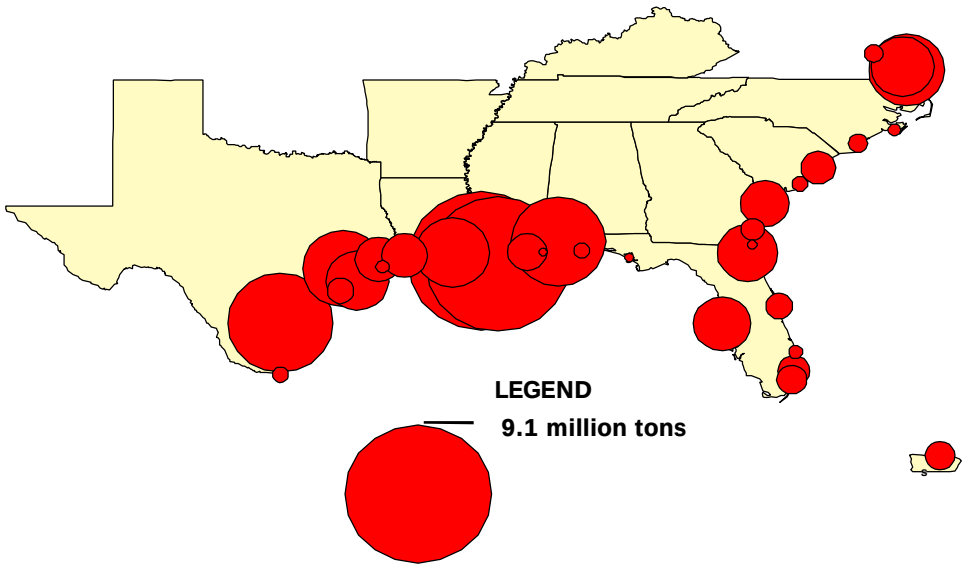


Exhibit B1-15
ALLIANCE PORT VOLUMES FOR LATIN AMERICAN TRADE
MANUFACTURED PRODUCTS

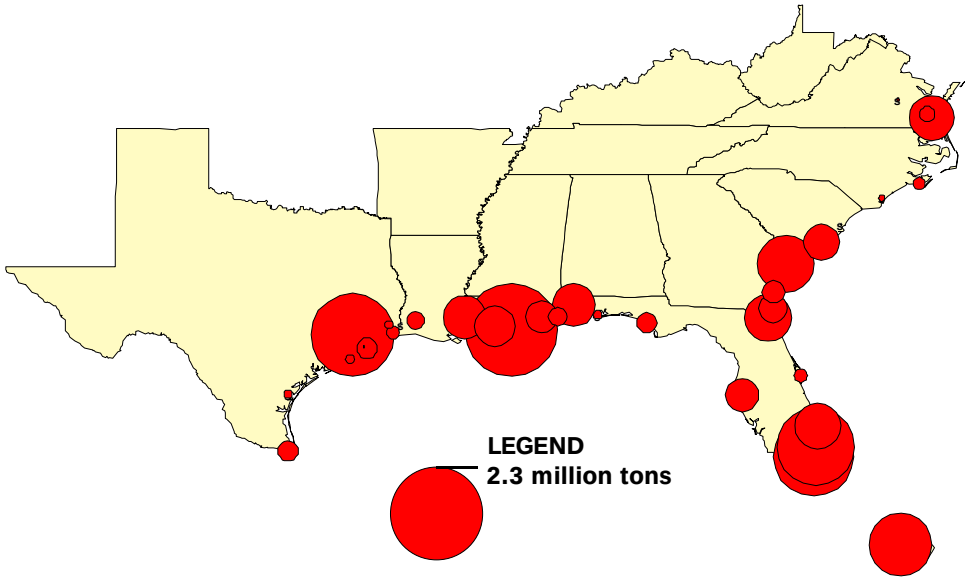
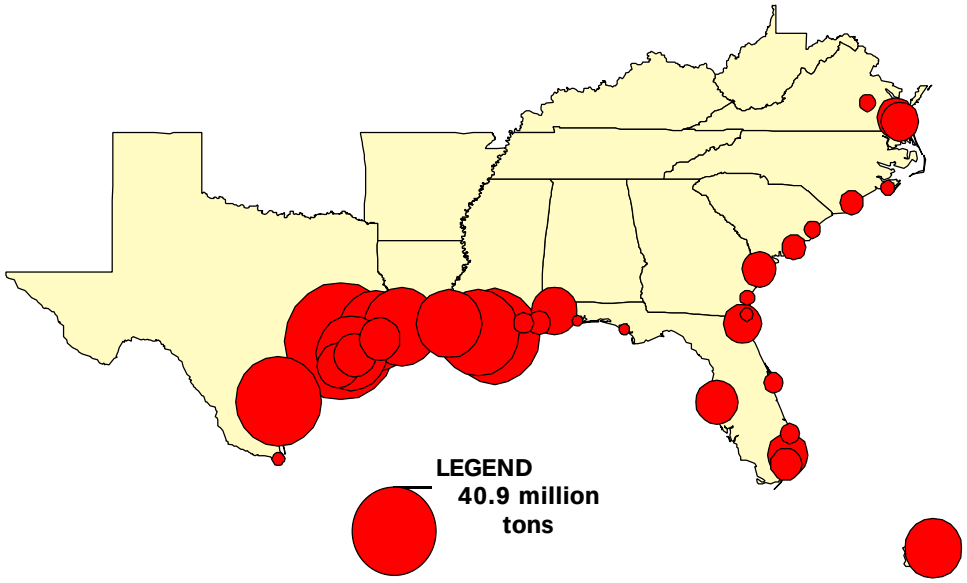


Exhibit B1-16
ALLIANCE PORT TRAFFIC 1996 – LATIN AMERICAN TRADE
All Commodities – Tons



Much like all other rankings, the gateway rankings are skewed as a result of the high tonnage volumes for crude and refined petroleum products; Texas and Louisiana are shown to dominate Latin American gateway sea trade (**Exhibits B1-17** and **B1-18**). However, from a value standpoint, other Alliance states have a more prominent role, especially when the data regarding crude and refined petroleum products is excluded.

Exhibit B1-17
ALLIANCE GATEWAY STATES FOR LATIN AMERICAN SEA TRADE
1996 Tons vs. Value

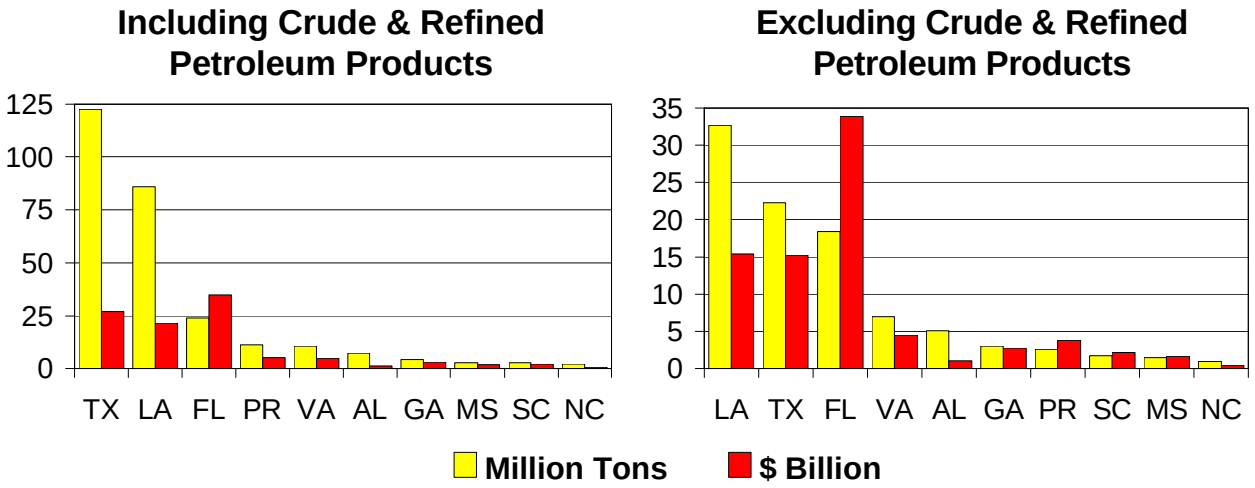
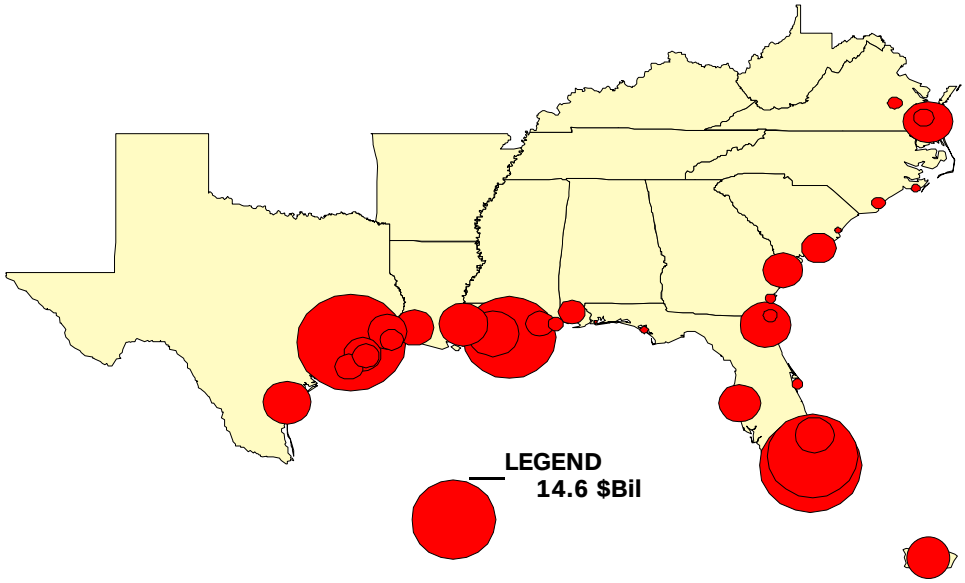


Exhibit B1-18
ALLIANCE PORT TRAFFIC
1996 – LATIN AMERICAN TRADE
All Commodities – Value



U.S. Origins and Destinations by Commodity Group

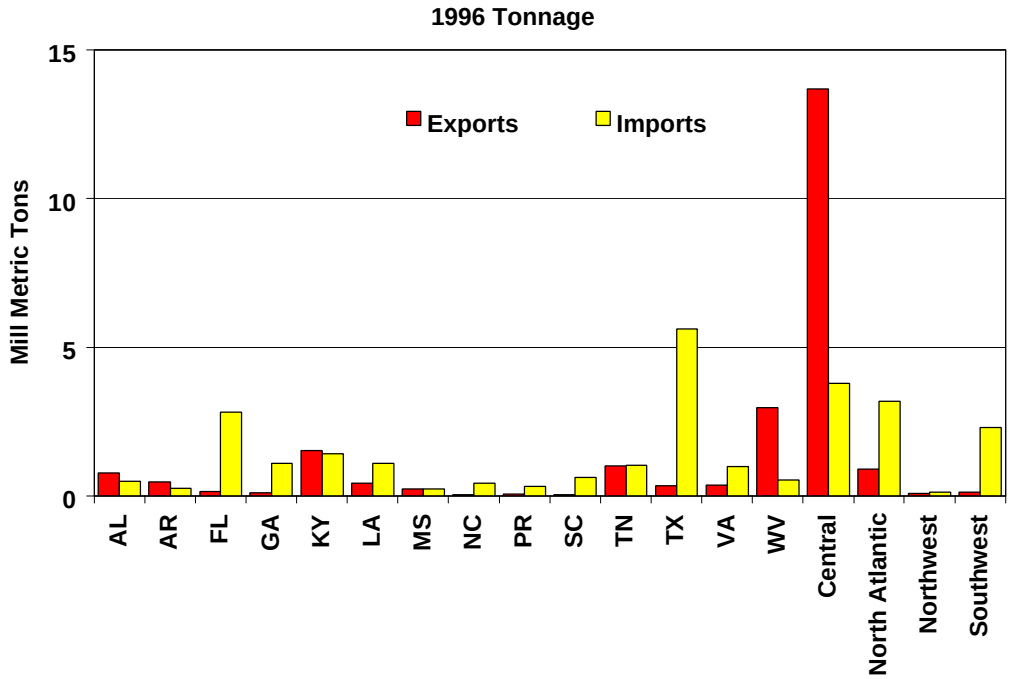
The distribution pattern for different commodity groups varies, due to differences in production and consumption patterns of various U.S. regions.

Agricultural & Mining Products

The U.S. Origin/Destinations gateweying Agricultural & Mining Products through the Alliance are led by the Central region of the country. The Central region is the origin for 13.7 million tons of Agricultural & Mining Products using Alliance gateways to Latin America. That region is destination for 3.8 million tons of Agricultural & Mining Products from Latin America. The value measurement of trade between the Central region and Latin America is in line with the tonnage measurement--$3.2 Billion of exports originating in the Central region, and $0.35 billion of imports from Latin America. (**Exhibit B1-19**)

The next largest origin/destination for Latin American trade is Texas, followed by the North Atlantic region. Texas is the destination for 5.6 million tons of Agricultural & Mining Products gateweying in the Alliance from Latin America, and the originating point for 0.3 million tons sent to Latin America. In terms of value, this is $0.55 billion in imports and $0.05 billion in exports to the region.

Exhibit B1-19
U.S. ORIGIN/DESTINATIONS
AGRICULTURAL & MINING PRODUCTS



Primary Manufactured Products

The Primary Manufactured Product category is very different in its origin/destination profile. Texas is the largest origin/destination point for trade with Latin America in this commodity group, followed by Florida, Louisiana, and the Central and North Atlantic regions. Texas is the originating point for over 4 million tons of exports to Latin America, and the destination for over 2 million tons. The next closest exporters are the North Atlantic and Central regions, with 1.75 million and 1.7 million tons, respectively. Florida and Louisiana each import more Primary Manufactured Products from Latin America than Texas, as destinations for 3.0 and 2.2 million tons. (**Exhibit B1-20**)

Manufactured Products

Manufactured Products trade is led by the Central region, followed by Florida and the North Atlantic region. The central region was the origin for exports that totaled 2.2 million tons through Alliance gateways in 1996, while the region was the destination for 0.7 million tons. Florida followed with 1.8 million tons exported, and 0.6 million tons imported. The North Atlantic was the origin for 1.2 million tons of exports and the destination for 0.9 million tons of manufactured products. (**Exhibit B1-21**)

Exhibit B1-20
U.S. ORIGIN/DESTINATIONS
PRIMARY MANUFACTURED PRODUCTS

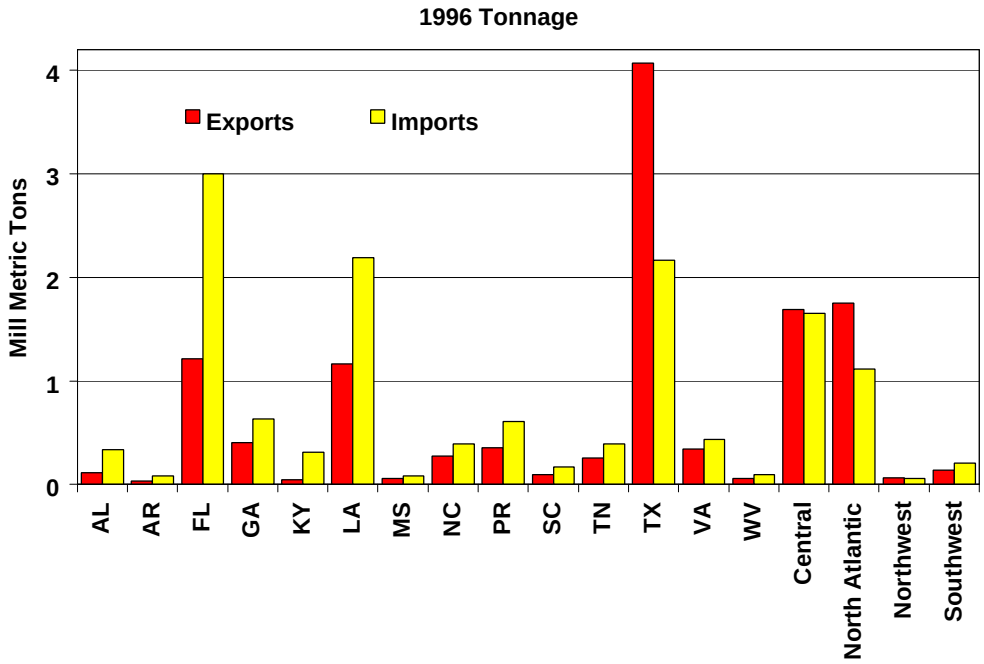
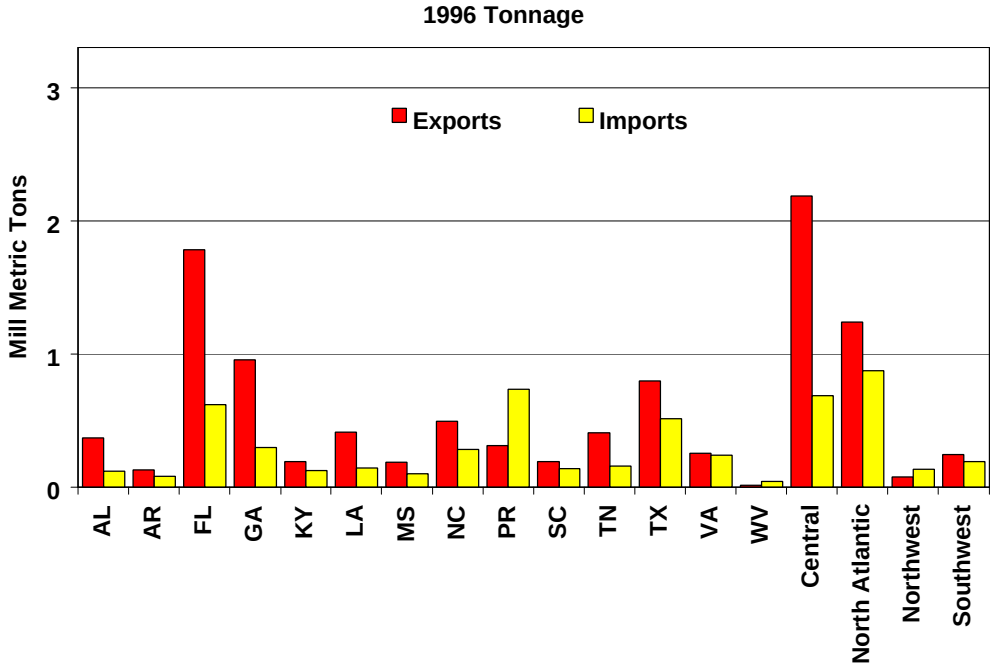


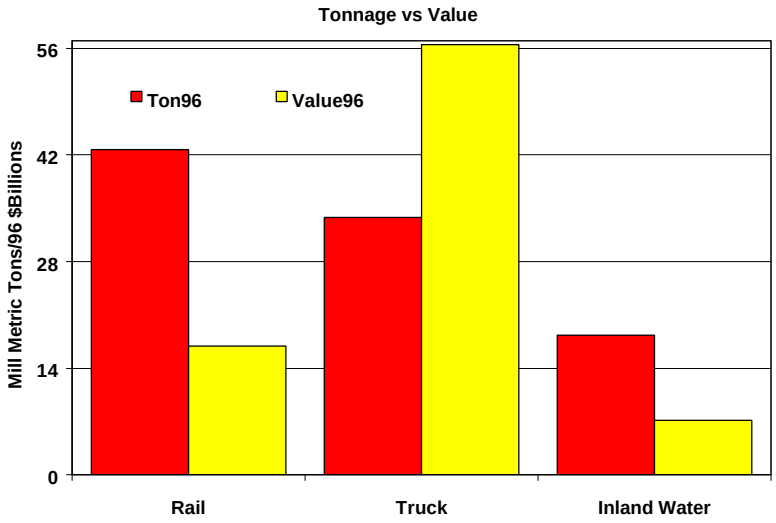
Exhibit B1-21
U.S. ORIGIN/DESTINATIONS
MANUFACTURED PRODUCTS



Inland Modal Choices for Alliance Seatrade

While the origin/destination pattern summarized above influences inland modal choices, the ranking of inland mode choice also varies depending upon the measure (weight or value) of trade used. In terms of weight, rail was the leading modal choice, followed by truck and inland water. Rail carried a total of 42.6 million tons of seatrade Alliance gateway seatrade in 1996, while trucks transported 33.8 million tons and inland water carried 18.3 million tons. Measured in value, truck-borne trade totaled $56.4 billion, followed by rail at $16.9 billion and inland water at $7.1 billion. (**Exhibit B1-22)**

Exhibit B1-22
1996 ALLIANCE SEATRADE
INLAND MODAL CHOICES



This distribution again emphasizes the importance of high value trade between the Alliance and Latin America. Trucks, while not carrying the level of tonnage that rail handles, are handling the most valuable goods traded with Latin America through Alliance gateways. This illustrates the crucial role played by interstates and other roadways in the Alliance-Latin American trade relationship.

Latin America Trading Partners for Sea Trade

The same seven countries or groups of countries appear at the top of both import and exports lists of primary Latin American trading partners for waterborne traffic through Alliance ports, although their rankings differ between exports and imports. The seven are Brazil; Colombia; Mexico; Venezuela; Jamaica and the Bahamas; Other Caribbean Islands; and Other Central American countries.

With respect to goods imported through Alliance gateway ports, in 1996, 94.0% of all imports that came from Latin America originated in one of the top seven.

The top two, Mexico and Venezuela, together originated 65.6%, and each of these percentages has been quite steady since 1992.

Companion figures for exports show less concentration. The top seven together accounted for 77.1% of Alliance gateway exports in 1996, little changed from the 78.4% in 1992. For exports, throughout the five-year period the top two trading partners were Mexico and Brazil, with Brazil leading Mexico until 1996. Together, the two nations received 39.6% of 1996 waterborne exports, up from 33.1% in 1995. Both the 1996 increase in the two-country share and Mexico's first place ranking are substantially due to a 60% surge in exports to Mexico. It is necessary to include four trading partners to account for at least half of exports. The group of Other Central American countries resides in third place throughout the five years, with fourth place variously occupied by Colombia, Jamaica and the Bahamas, and Venezuela.

ALLIANCE REGION AIR CARGO TRADE

Over the last half century it has become increasingly cost-effective to ship a wide variety of goods by air—especially those goods with a high value relative to weight. This trend has had a profound effect on the development of global, regional and national production networks. For example, many plant managers can use air transport to provide cost-effective just-in-time delivery of parts or products to customers or production partners in different countries and even continents. These products range from parts for computers, telecommunications equipment and motor vehicles to high-value cosmetics and apparel to fresh seafood, fruit and flowers.

The United States is a key player in the global production/consumption networks for many of these products and has experienced strong growth in airborne trade. Over the 1992-1996 period, international airborne commodity trade grew at an average annual rate of 9.0% for outbound flows and 10.3% for inbound flows. These growth rates are significantly higher than the growth rates for waterborne trade of 1.0% for outbound flows and 4.7% for inbound flows.

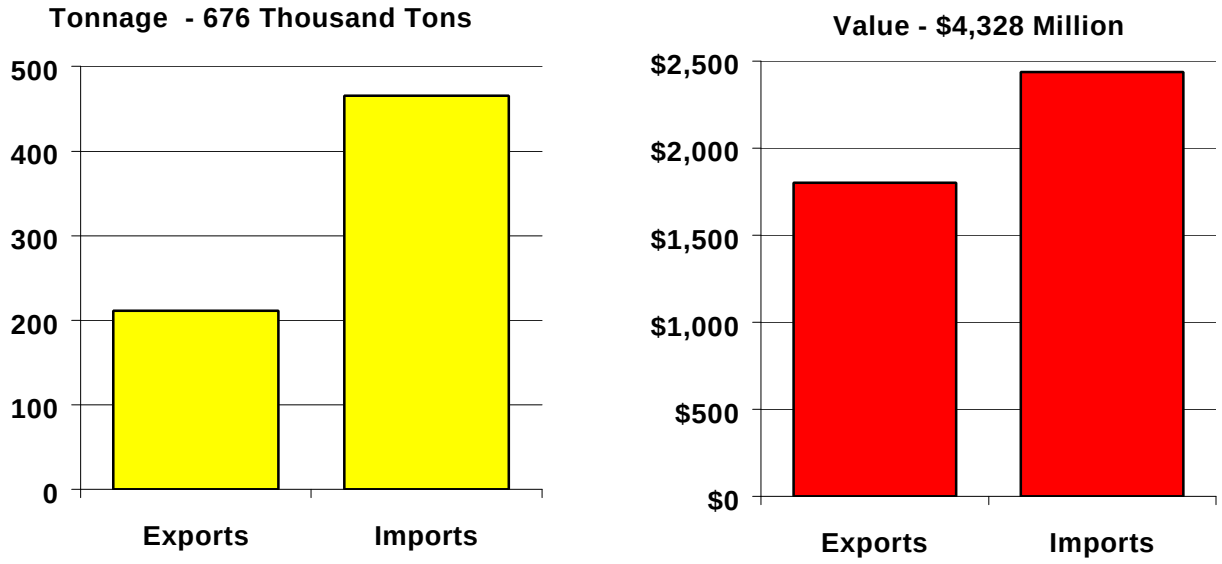
The largest destination of U.S. airborne exports is Asia (36% of 1996 exports), followed by Europe (36%), Latin America (17%) and Canada (7%). Asia and Canada were the fastest growing destinations of U.S. airborne exports with annual average 1992-96 growth rates of 15.7% and 17.4% respectively. Airborne exports to Latin America and Europe each experienced significantly lower growth rates of about 5%. The largest source of U.S. airborne imports is Asia (41% of 1996 imports), followed by Europe (34%) and Latin America (21%). Imports from Latin America grew at an average annual rate of 7.6% over the 1992 to 1996 period while all other regions had growth rates in the range of 10-12% per year.

U.S. Air Cargo Trade With Latin America

U.S. air cargo trade with Latin America totaled 676 thousand tons in 1996. This volume represented a total value of over $4.3 billion in total trade. Of this, 211,000 tons of air cargo trade was exported to Latin America from the U.S.,

while another 465,000 tons were imported to the U.S. (**Exhibit B1-23**). On the value side, $1.8 billion worth of air cargo was exported from the U.S., while $2.4 billion worth was imported.

Exhibit B1-23
U.S. AIR CARGO TRADE WITH LATIN AMERICA



Air Cargo Commodity Groups

As discussed, the characteristics of various commodity groups influences the extent to which air freight is or is not an appropriate modal choice.

When viewed on a tonnage basis (see **Exhibit B1-24**), Farm Products are by far the predominant commodity group. Fresh Fish and Other Marine Products rank second, followed in sequence by Apparel, Machinery (excluding Electrical), and Electrical Machinery.

The pattern of leading Latin American air cargo commodity groups differs when viewed on the basis of value (see **Exhibit B1-25**). The Apparel group is the leading group, followed by Electrical Machinery and Machinery (excluding Electrical). Farm Products, the leading air cargo commodity group on the basis of tonnage, is not even within the five highest ranked commodity groups when measured in terms of value.

Exhibit B1-24
KEY AIR CARGO COMMODITIES – LATIN AMERICAN TRADE

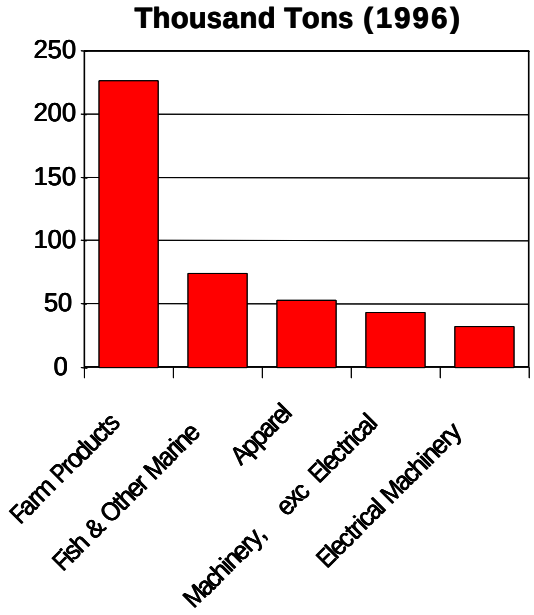
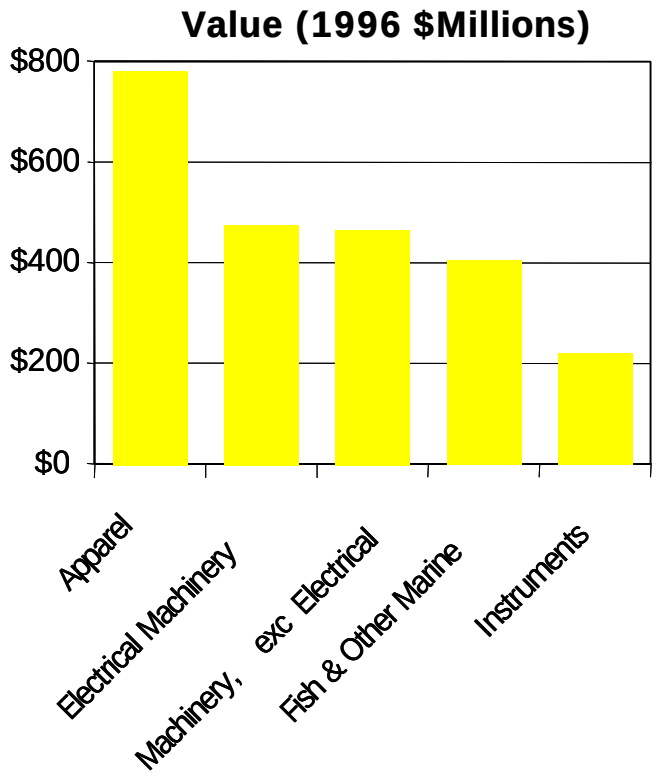


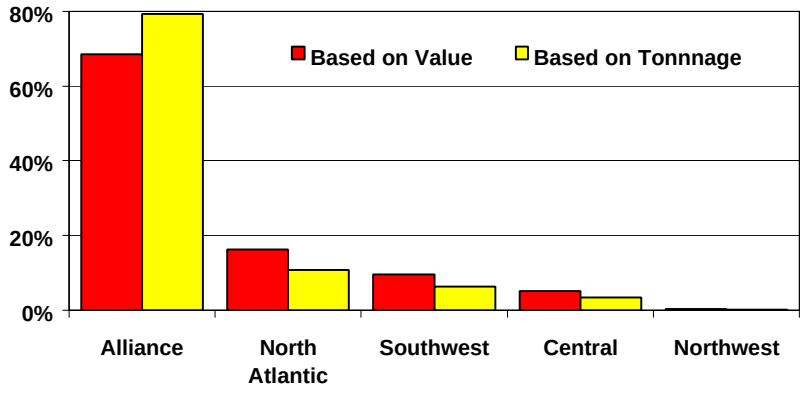
Exhibit B1-25
KEY AIR CARGO COMMODITIES – LATIN AMERICAN TRADE



Gateway Regions for Air Cargo Trade

The Alliance is the leading gateway region for air cargo trade with Latin America, both in terms of tonnage and value. Based on tonnage, the Alliance is the gateway for over 79% of U.S. air cargo trade with Latin America (**Exhibit B1-26**). The next closest regions are the North Atlantic and the Southwest with 10.8% and 6.3%, respectively. In terms of value, the Alliance is the gateway for 68.5% of air cargo trade with Latin America, followed again by the North Atlantic and Southwest with 16.3% and 9.6%.

Exhibit B1-26
GATEWAY REGIONS FOR 1996 AIR CARGO TRADE WITH LATIN AMERICA



Air Cargo Trade by Alliance Gateway States

Air cargo gateways in the Alliance are led by Florida, which handled 488 thousand tons in 1996 (**Exhibit B1-27**). In the next tier, Puerto Rico was the gateway for 16,000 tons, followed by Tennessee (9,000 tons), Texas (8,000 tons), and North Carolina (7,000 tons).

U.S. Origin and Destination Air Cargo Trade

The Alliance is also the leading origin and destination for trade with Latin America in terms of both tonnage and value (**Exhibit B1-28**). In terms of tonnage, the Alliance is the origin or destination for 37% of U.S. air cargo trade with Latin America. The North Atlantic, Central, and Southwest regions follow with 27%, 19%, and 16%, respectively. In terms of value, the Alliance is the origin or destination for 40% of air cargo trade with Latin America, again followed by the North Atlantic (27%), Central (17%), and Southwest (15%).

Exhibit B1-27
1996 AIR CARGO TRADE WITH LATIN AMERICA
ALLIANCE GATEWAY STATES

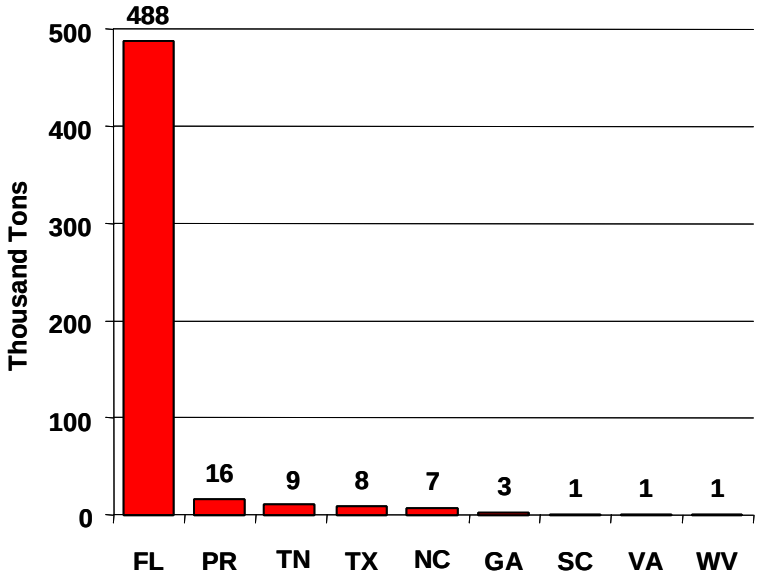
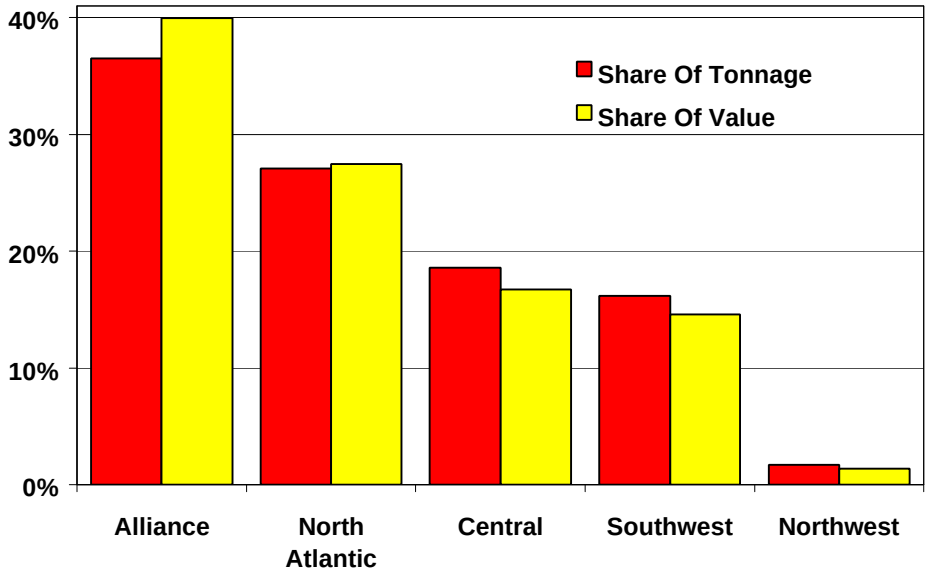


Exhibit B1-28
U.S. ORIGINS & DESTINATIONS
1996 AIR CARGO TRADE WITH LATIN AMERICA



Alliance's Air Cargo Trading Partners

Exhibit B1-29 (following page) depicts the Alliance's air cargo trade relationships with Latin American countries. In terms of tonnage, Colombia is the leading trade partner at nearly 170,000 tons. Other Central American countries are next with just over 75,000 tons. Chile, Brazil, and Ecuador follow with 61,000 tons, 42,000 tons, and 39,000 tons, respectively.

In terms of value, Other Central American countries lead with $569 million of air cargo trade with the Alliance. The next tier consists of: Columbia ($519 million), Brazil ($400 million), the Dominican Republic ($288 million), and Chile ($218 million).

ALLIANCE REGION CROSS-BORDER TRADE WITH MEXICO

Another component of Latin American trade is cross-border trade with Mexico through the border states of Texas, Arizona, New Mexico and California. Mexico is an important cross-border trade market for the Alliance, both in terms of the Alliance (Texas) as a gateway to Mexico, and in terms of the Alliance's own trade with Mexico.

CROSS-BORDER TRADE COMMODITY GROUPS

Shown in **Exhibit B1-30** is the pattern of leading cross-border trade commodity groups based upon tonnage. As depicted, Non-Metallic Minerals is the leading commodity group, followed by the Stone, Clay, Glass and Concrete group. Farm Products and Metallic Ores are the third and fourth leading commodity groups based upon tonnage.

Exhibit B1-30
KEY CROSS-BORDER COMMODITIES – LATIN AMERICAN TRADE

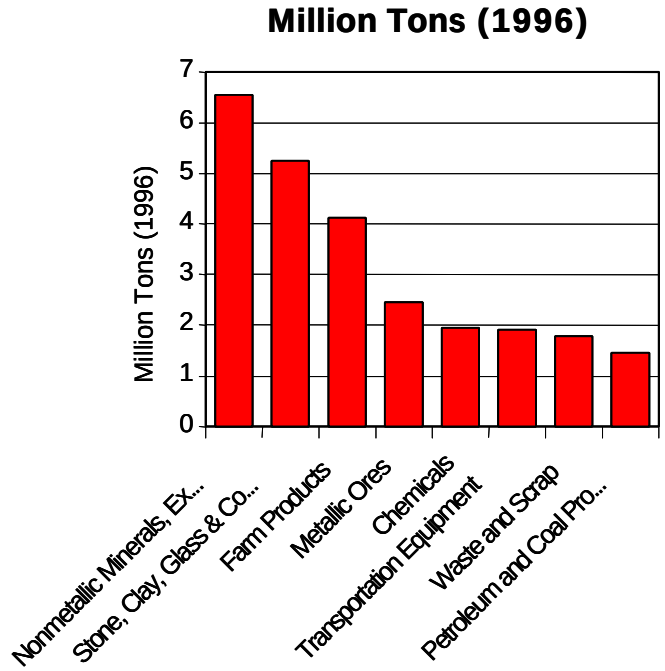
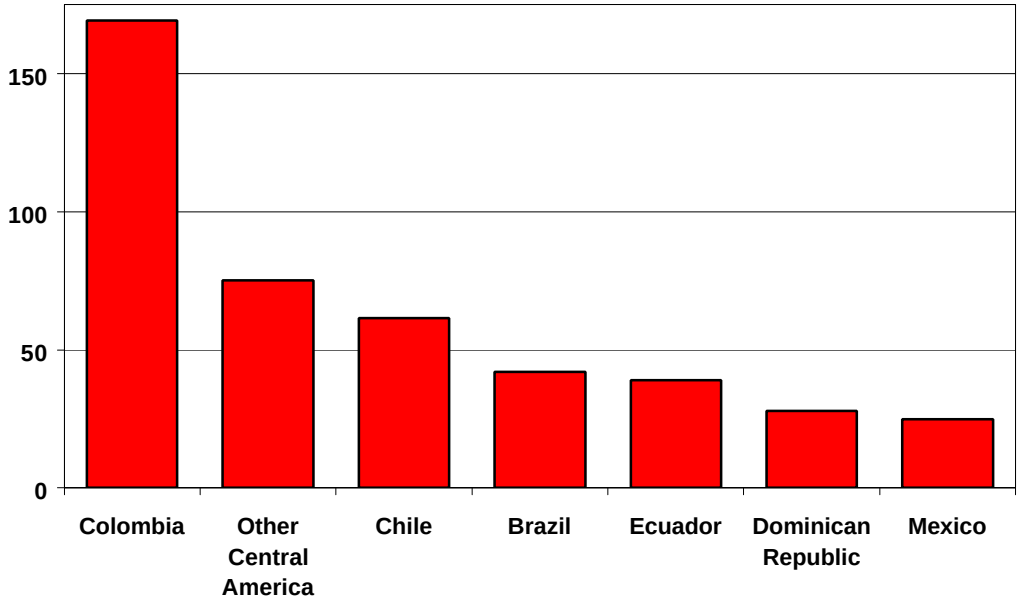
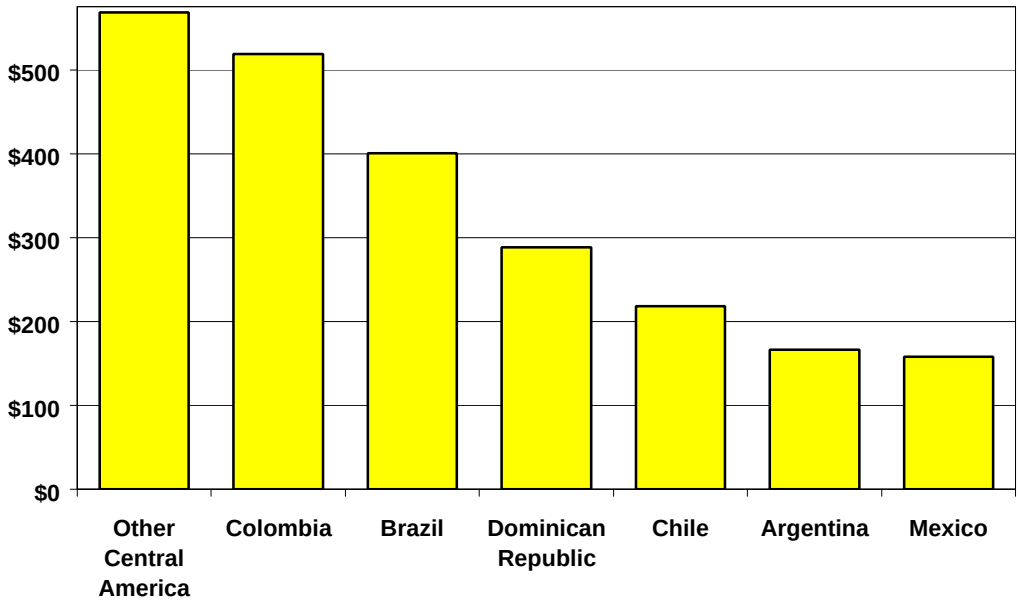


Exhibit B1-29
ALLIANCE'S AIR CARGO TRADING PARTNERS (TOP 80%)
1,000's Tons (1996)

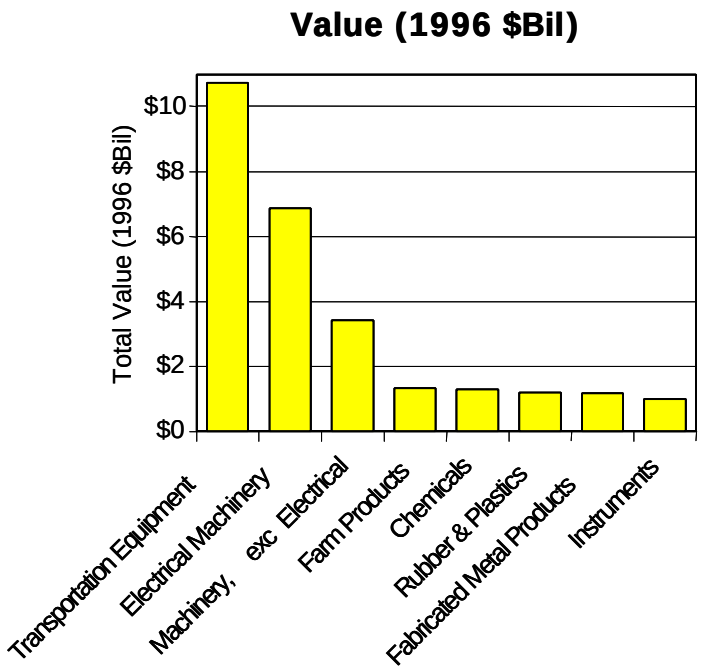


Value (1996 $ Millions)



Due to the characteristics of the various commodity groups, the pattern of leading cross-border trade commodities is quite different when measured in terms of value. **Exhibit B1-31** shows that the cross-border trade commodity group with the highest value is Transportation Equipment, followed by Electrical Machinery and Machinery (excluding Electrical).

Exhibit B1-31
KEY CROSS-BORDER COMMODITIES – LATIN AMERICAN TRADE



Alliance as a Cross-border Trade Gateway

During 1996, 87.5 million tons in surface trade crossed the border between the U.S. and Mexico, of which 50 million tons were exports and 37.4 million were imports (**Exhibit B1-32**). Of this trade, over 75 percent gatewayed through Texas, 39.4 million tons in exports and 27 million tons in imports.

Alliance as an Origin/Destination

Not only is the Alliance the major gateway for cross-border trade, it is also the major origin/destination for this trade. Of the U.S. total cross-border trade of 87.5 million tons, 46.7 percent either originated or terminated in the Alliance. The Alliance's cross-border trade comprised 24.6 million tons of exports and 16.3 tons of imports (**Exhibit B1-33**).

Exhibit B1-32
1996 SURFACE CROSS-BORDER TRADE WITH MEXICO
U.S. Gateways

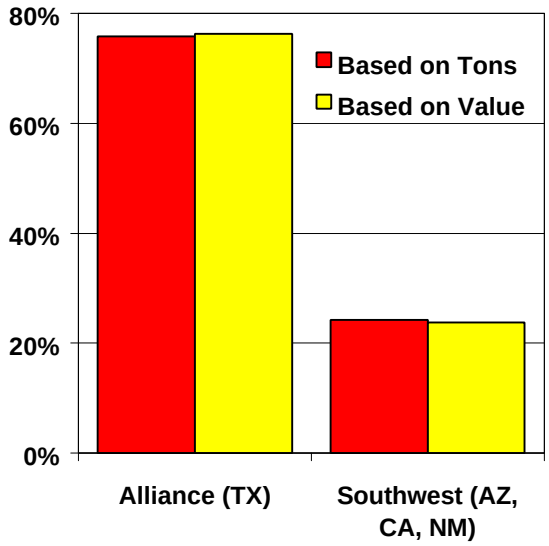
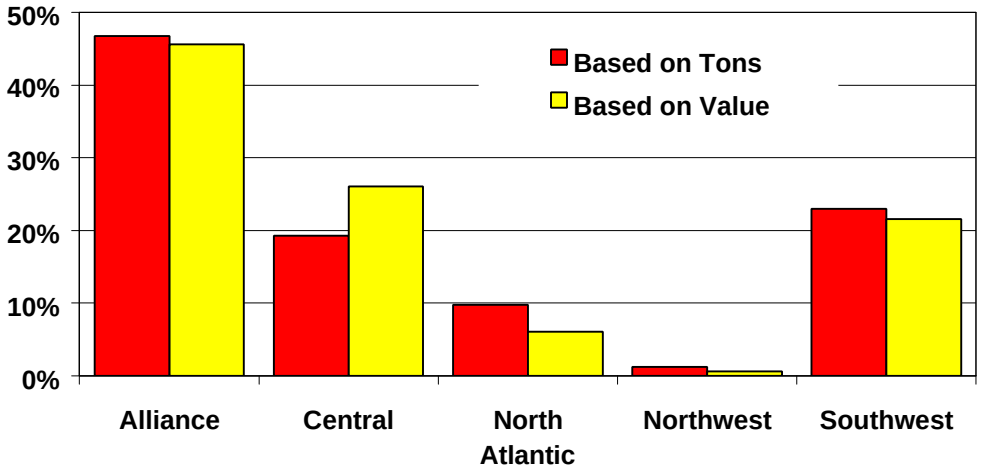


Exhibit B1-33
1996 SURFACE CROSS-BORDER TRADE WITH MEXICO
U.S. Origin & Destination



SECTION B2
LATIN AMERICAN TRADE FORECASTS

Latin America offers tremendous opportunity as a source of new inbound and outbound trade growth for the Alliance Region and the rest of the country. The objective of the LATTS trade forecast analyses was to characterize the size and composition of these trade flows and to give some indication of how much bigger they could become by the year 2020. The forecasts produced by LATTS are for trade flowing through the gateways of the Southeastern Alliance Region, between the U.S. and Latin America, Asia, Europe, and the rest of the world. In keeping with the focus of this study, the greatest detail is available for Latin America.

Two scenarios were adopted for purposes of these analyses.

- The "Base Case" forecast assumed a continuation of recent trends and conditions until 2020.

- The "High Case" assumed that significant events could occur which would result in even greater trade with Latin America. These events could include:
  - Increased liberalization of trade, e.g., a Western Hemisphere Free Trade Agreement.
  - Higher economic growth trends for Latin America and/or the United States.
  - Changes in U.S. policies regarding trade with Cuba.

BASE CASE TRADE FORECAST

The Base Case forecast for trade flows between the United States, world regions, and Latin American countries used in this study is consistent with Standard & Poor's DRI's global economic outlook as of the Spring of 1998.

The Base Case outlook forecast inbound and outbound trade flows, in metric tons, by water, cross-border, and air for STCC based commodities. The trade flows were generated for Latin American countries and regions, and several other world regions both to and from the Southeastern Alliance gateways. To ensure a comprehensive measure of trade volumes handled at U.S. gateways, in-transit flows were also forecast at the same level of detail as the domestic flows.

A key source of information used in developing these forecasts was the DRI/Mercer World Sea Trade Service (WSTS). This service provides invaluable information to managers of international shipping services, port and transportation planners, governments and government agencies, and port authorities and other organizations whose futures are tied to the patterns of international trade.

WSTS integrates DRI's world trade databases and economic and trade models with Mercer's long-standing experience in world primary- and liner- shipping markets, to produce detailed historical data and forecasts of cargo movements for major trade routes around the world. The service is updated quarterly and summary results are published along with articles of interest in the World Sea Trade Service Review. The forecast used for this study was prepared in the first quarter of 1998.

The commodity set reported by WSTS was correlated with the STCC commodities used in this study. WSTS directly forecasts trade with Brazil, Argentina, and Mexico. For the other countries, specific forecasts were developed. The trade forecasts for these countries are consistent, on a regional basis, with the WSTS outlook for the Other Caribbean Nations, Western Latin America Countries, and Other Eastern Latin American Countries. Country specific forecasts were developed based on national differences in export, import, and GDP forecasts for each country relative to the WSTS region to which it belongs. All other countries and region's waterborne trade flows were derived directly from WSTS.

WSTS was used to forecast waterborne trade flows. Air and cross-border transportation flow forecasts were developed based on three factors:

- The waterborne forecast for the commodity corridor;
- The observed difference (1992 to 1996) between air/cross-border and waterborne trade growth trends for a commodity;
- A time trend that reduces the influence of the observed difference in trade growth by mode of transport as the forecast progresses.

This approach based air and cross-border commodity corridor flows on the waterborne forecasts. It also preserved observed shifts in modal shares but prevented them from changing too radically from current patterns by 2020. Goods not currently moving by a given mode in a specific commodity corridor were not predicted to move by that mode over the forecast interval.

Latin America in World Context

These analyses revealed that Latin America will remain the largest regional destination and origin for Southeastern Alliance gateway trade over the forecast period. By 2020, U.S. exports to Latin America through the Southeastern Alliance will be 341 million metric tons (MT), while imports will be 590 million MT. More than half of imports by volume will be crude oil. Total imports excluding crude oil will be 257 million MT in 2020. Regional comparisons of trade volume in 2020 are displayed in **Exhibit B2-1** and **B2-2**.

Latin American trade through the Southeastern Alliance gateways will also experience the fastest growth among world regions. Average annual growth

rates of exports will be 5.3% from 1996-2020, while imports will grow at a rate of

Exhibit B2-1
SOUTHEASTERN ALLIANCE GATEWAY BASE CASE FORECAST IN 2020

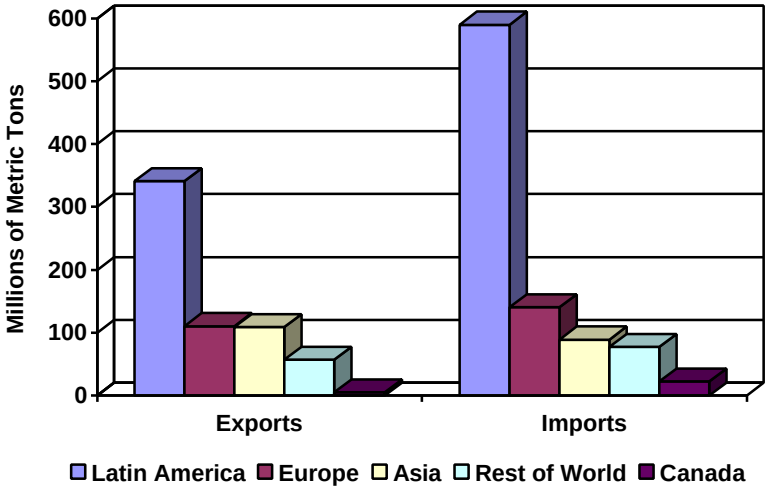
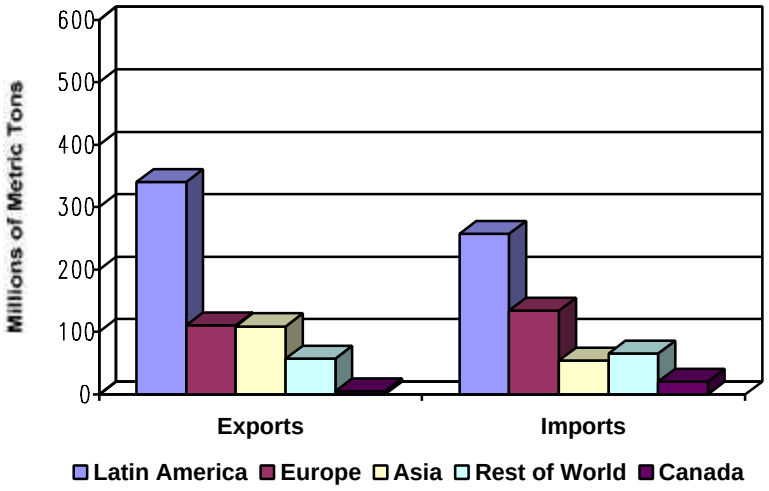


Exhibit B2-2
SOUTHEASTERN ALLIANCE GATEWAY BASE CASE FORECAST IN 2020
EXCLUDING CRUDE OIL AND NATURAL GAS



3.8% per year. Excluding oil, however, Latin America drops to second place in growth rates, at an annual rate of growth of 4.0%. Total Asian imports through the Southeastern Alliance are forecast to decline at a rate of 4.0% per year, as oil sources switch from Asia to Latin America. Growth in Asian imports excluding oil were forecast to grow at a rate of 4.8%. The fastest growth in volume imports excluding oil will occur from Europe, at 7.1% from 1996-2020.

Trade Overview

The distribution of trade forecast for 2020 resembles the situation in 1996. As can be seen in **Exhibit B2-3**, Mexico will continue to account for the majority of U.S. exports to Latin America through the Southeastern Alliance gateways. In fact, its share of exports will rise from 52% in 1996 to 63% in 2020. Brazil will remain the second largest destination for exports. Colombia, with a rapid annual average growth rate of 5.7% through 1996-2020, will account for the third largest share of exports in 2020.

There will be a shift in the dominant mode of transportation of goods to Latin America. In 1996, seaborne trade represented nearly 60% of exports. By 2020, because of the rapid growth in exports to Mexico, cross-border trade will account for 56% of exports, and water-borne exports will fall to 44%. While airborne exports will remain a small share of exports by volume, their growth will be extremely rapid—over 10% annually. Over the next 24 years, the total volume of airborne exports will rocket from 163,600 MT to 1.6 million MT.

Differentials in commodity rates of growth will also cause a shift in international transportation modes. A summary of the commodity forecast is displayed in **Exhibit B2-4**.

By volume, the largest commodity group exported in 2020 will continue to be primary goods. However, exports of manufactured goods will grow so rapidly that their volume will nearly equal that of primary manufactured exports by 2020. In all, total volume of exports to Latin America will be 3.4 times as large in 2020 as in 1996. Manufactured export volumes, in contrast, will be more than 5 times greater in the same period. **Exhibit B2-5** graphically displays the growth of the basic commodity exports.

As in 1996, Mexico will continue to dominate imports from Latin America in 2020 as well, accounting for 48% of import volume. The relative ranking of other countries will remain similar, with a few notable exceptions. As noted in **Exhibit B2-6**, imports from the group Other Caribbean Islands are forecast to actually decrease. This is primarily due to a decline of imports of petroleum products from this region. Imports from the Bahamas and Jamaica are also forecast to decline, as imports of metallic ores fall from this region. On the other hand, imports from Chile are expected to grow more rapidly than all other countries, with an average annual growth rate of 7.3% over the 1996-2020 period.

Exhibit B2-3
SOUTHEASTERN ALLIANCE GATEWAY EXPORTS TO LATIN AMERICA
BASE CASE FORECAST, METRIC TONS

Destination	1996	2010	2020	Average Annual Growth 92-96	Average Annual Growth 96-20
Latin America	**98,885,602**	**217,039,012**	**340,912,256**	**8.8%**	**5.3%**
Argentina	2,268,525	5,542,469	8,725,506	15.2%	5.8%
Bahamas & Jamaica	4,126,036	5,401,815	6,365,710	1.9%	1.8%
Bolivia	31,092	61,525	94,338	16.9%	4.7%
Brazil	10,851,376	16,862,942	24,394,136	6.8%	3.4%
Chile	2,686,576	4,722,995	7,572,099	16.7%	4.4%
Colombia	4,530,075	8,910,818	17,033,362	15.5%	5.7%
Cuba	61,305	68,192	89,000	8.4%	1.6%
Dominican Republic	2,550,369	5,103,361	7,302,893	4.1%	4.5%
Ecuador	1,187,841	2,272,223	3,721,449	12.3%	4.9%
Guyana, Suriname, French Guiana	592,974	1,272,611	1,774,079	1.4%	4.7%
Haiti	768,262	1,418,995	1,812,349	12.0%	3.6%
Mexico	51,707,658	132,077,557	215,114,496	11.4%	6.1%
Panama	1,753,150	2,675,329	3,804,070	2.0%	3.3%
Paraguay	69,359	168,112	273,157	29.3%	5.9%
Peru	1,561,749	3,098,856	5,138,733	8.9%	5.1%
Uruguay	236,985	376,747	575,924	11.7%	3.8%
Venezuela	4,238,707	10,614,734	16,632,803	- 1.9%	5.9%
Other Caribbean Islands	3,369,017	5,274,853	6,794,218	4.4%	3.0%
Other Central America	6,294,550	11,114,865	13,693,941	4.7%	3.3%

Exhibit B2-4
SOUTHEASTERN ALLIANCE GATEWAY EXPORTS TO LATIN AMERICA
BASE CASE FORECAST, METRIC TONS

Commodity	1996	2010	2020	Average Annual Growth 92-96	Average Annual Growth 96-20
Total All Commodities	**98,885,602**	**217,039,012**	**340,912,256**	**8.8%**	**5.3%**
Manufactured Commodities	21,052,288	59,829,933	106,138,559	4.2%	7.0%
Primary Commodities	41,714,220	82,966,092	126,340,816	10.9%	4.7%
Primary Manufactured Commodities	36,034,944	73,354,067	107,543,909	9.3%	4.7%
Crude Oil and Natural Gas	84,152	888,913	888,970	53.9%	10.3%

Exhibit B2-5
SOUTHEASTERN ALLIANCE GATEWAY EXPORTS TO LATIN AMERICA
BASE CASE FORECAST -- 1992-2020

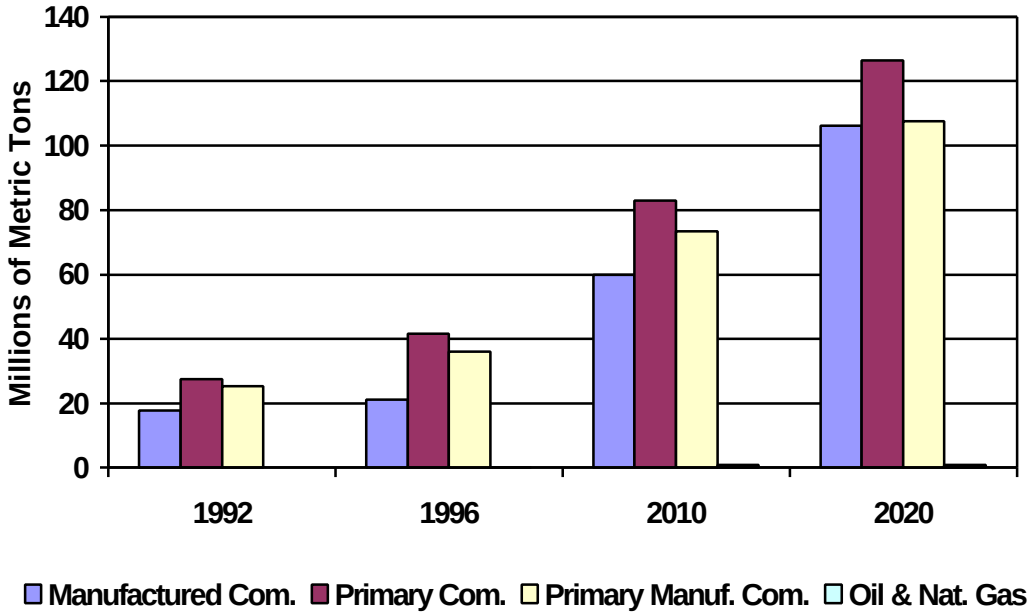


Exhibit B2-6
SOUTHEASTERN ALLIANCE GATEWAY IMPORTS FROM LATIN AMERICA
BASE CASE FORECAST, METRIC TONS

Origin	1996	2010	2020	Average Annual Growth 92-96	Average Annual Growth 96-20
Latin America	**241,036,076**	**403,853,781**	**590,229,000**	**12.2%**	**3.8%**
Argentina	3,433,814	4,326,016	6,348,379	12.0%	2.6%
Bahamas & Jamaica	8,164,104	4,692,026	4,891,365	- 3.8%	- 2.1%
Bolivia	56,289	138,821	256,369	85.4%	6.5%
Brazil	11,299,131	22,403,666	34,791,506	20.1%	4.8%
Chile	1,397,031	3,959,407	7,506,106	13.5%	7.3%
Colombia	15,413,035	26,799,795	42,281,612	13.1%	4.3%
Cuba	9,159	9,243	12,683	10.7%	1.4%
Dominican Republic	718,346	1,428,517	2,098,862	6.2%	4.6%
Ecuador	4,707,453	7,301,977	10,245,129	27.4%	3.3%
Guyana, Suriname, French Guiana	1,651,698	2,009,073	2,356,077	- 0.4%	1.5%
Haiti	30,617	55,348	73,786	- 4.2%	3.7%
Mexico	98,536,416	190,323,710	285,924,105	16.3%	4.5%
Panama	408,345	428,576	605,720	7.8%	1.7%
Paraguay	38,673	84,208	145,294	120.4%	5.7%
Peru	1,210,074	2,085,349	2,960,689	19.9%	3.8%
Uruguay	63,971	94,128	134,188	23.3%	3.1%
Venezuela	66,346,218	120,512,557	169,336,895	9.1%	4.0%
Other Caribbean Islands	23,311,279	10,665,924	12,198,010	11.3%	- 2.7%
Other Central America	4,240,433	6,535,422	8,062,217	2.7%	2.7%

In 1996, U.S. imports from Latin America were overwhelmingly seaborne, both including and excluding crude oil imports. As with exports, imports by cross-border and air transportation will grow much more rapidly than water, at 6.2% and 6.5% respectively. Excluding oil imports, the share of trade that is waterborne will fall from 72.8% in 1996 to 55.2% in 2020, while cross-border imports will rise from 26.8% to 44.2% of total imports. In other words, cross-border imports are expected to rise to more than 4 times current levels under the Base Case forecast. Air imports also will rise by more than 4 times current levels, from 372,000 MT to 1.69 million MT in 24 years.

Commodity forecasts are displayed in **Exhibit B2-7** and **Exhibit B2-8**. The share of crude oil in Latin American imports will fall slightly by 2020, accounting for 56% in that year. Manufactured commodities will again experience the fastest growth under the Base Case forecast, rising at an annual average rate of 7.3%. In total, import volumes are expected to be 2.4 times higher in 2020 than in 1996. Manufactured imports are forecast to be 5.5 times higher in the same time frame.

Exhibit B2-7
SOUTHEASTERN ALLIANCE GATEWAY IMPORTS FROM LATIN AMERICA
BASE CASE FORECAST, METRIC TONS

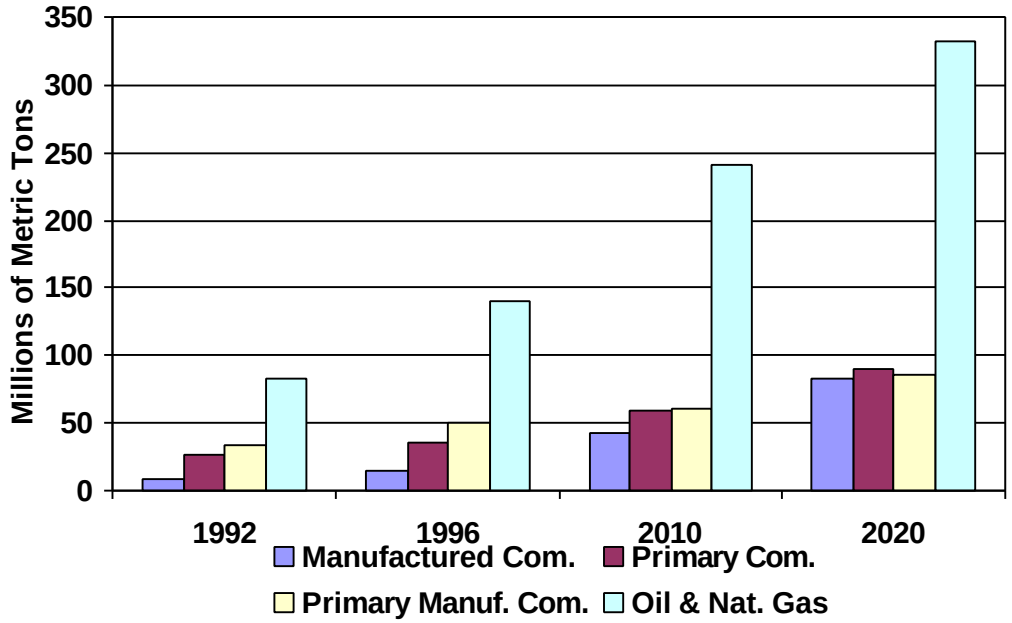
Commodity	1996	2010	2020	Average Annual Growth 92-96	Average Annual Growth 96-20
Total All Commodities	**241,036,076**	**403,853,781**	**590,229,000**	**12.2%**	**3.8%**
Manufactured Commodities	15,186,956	43,244,039	83,046,906	14.1%	7.3%
Primary Commodities	34,894,318	59,360,811	89,410,202	7.4%	4.0%
Primary Manufactured Commodities	50,490,101	60,520,434	84,936,556	10.7%	2.2%
Crude Oil and Natural Gas	140,464,704	240,728,496	332,835,296	13.9%	3.7%

HIGH CASE TRADE FORECAST

A High Case forecast was developed to illustrate the impact of more favorable trade conditions in Latin America on trade flows with the United States. It is based on a scenario of fully liberalized trade and investment flows in the Western Hemisphere. While a certain degree of trade liberalization was assumed in the Base Case forecast, the High Case scenario incorporated a much more rapid and comprehensive move to free trade and investment.

High Case assumptions focused on the possible increase in both inbound and outbound traffic for each country and commodity. The increase was also assumed to depend on time. Trade liberalization was assumed to have an impact starting in the year 2000, becoming more pronounced in the second decade than the first.

Exhibit B2-8
SOUTHEASTERN ALLIANCE GATEWAY IMPORTS FROM LATIN AMERICA
BASE CASE FORECAST
1992-2020



Trade flows with Cuba were handled uniquely. The High Case assumed that trade with Cuba would have been normalized in the year 2000. Inbound and outbound trade flows were forecast to rise very rapidly from existing levels (on a per capita basis) to levels expected in countries with similar incomes, natural resources, and domestic demand conditions in the region. Cuba was also expected to benefit significantly from the return of offshore capital, which would be used to finance U.S. exports to Cuba.

Forecast Results

U.S. exports to Latin America through the Southeastern Alliance were forecast to grow at an annual rate of 6.6% under the full trade liberalization scenario. This is more than 25% faster than under the Base Case forecast. With High Case assumptions, the volume of exports in 2020 will be 34% higher than the 2020 volume under the Base Case. Latin American country and commodity details are shown in **Exhibit B2-9** and Exhibit **B2-10**.

Exhibit B2-9
SOUTHEASTERN ALLIANCE GATEWAY EXPORTS TO LATIN AMERICA
HIGH CASE FORECAST, METRIC TONS

Destination	1996	High: 2010	High: 2020	High: Average Annual Growth 96-20	% Difference from Base in 2020
Latin America	**98,885,602**	**249,281,819**	**457,267,948**	**6.6%**	**34.1%**
Argentina	2,268,525	6,451,018	12,776,155	7.5%	46.4%
Bahamas & Jamaica	4,126,036	6,007,563	8,356,961	3.0%	31.3%
Bolivia	31,092	69,762	129,420	6.1%	37.2%
Brazil	10,851,376	19,689,440	35,998,109	5.1%	47.6%
Chile	2,686,576	5,517,308	11,109,829	6.1%	46.7%
Colombia	4,530,075	9,516,832	20,195,985	6.4%	18.6%
Cuba	61,305	8,471,690	12,626,550	24.9%	14,087.1%
Dominican Republic	2,550,369	5,674,151	9,596,087	5.7%	31.4%
Ecuador	1,187,841	2,398,395	4,293,522	5.5%	15.4%
Guyana, Suriname, French Guiana	592,974	1,370,763	2,150,029	5.5%	21.2%
Haiti	768,262	1,526,234	2,202,128	4.5%	21.5%
Mexico	51,707,658	144,815,538	273,799,518	7.2%	27.3%
Panama	1,753,150	2,834,588	4,465,489	4.0%	17.4%
Paraguay	69,359	183,500	342,873	6.9%	25.5%
Peru	1,561,749	3,453,418	6,764,402	6.3%	31.6%
Uruguay	236,985	447,384	875,039	5.6%	51.9%
Venezuela	4,238,707	11,841,372	21,940,618	7.1%	31.9%
Other Caribbean Islands	3,369,017	6,118,502	9,826,480	4.6%	44.6%
Other Central America	6,294,550	12,894,362	19,818,748	4.9%	44.7%

Exhibit B2-10
SOUTHEASTERN ALLIANCE GATEWAY IMPORTS FROM LATIN AMERICA
HIGH CASE FORECAST, METRIC TONS

Origin	1996	High: 2010	High: 2020	High: Average Annual Growth 96-20	% Difference from Base in 2020
Latin America	**241,036,076**	**426,062,372**	**681,643,141**	**4.4%**	**15.5%**
Argentina	3,433,814	4,551,535	7,265,864	3.2%	14.5%
Bahamas & Jamaica	8,164,104	5,056,939	5,984,510	-1.3%	22.4%
Bolivia	56,289	150,838	330,281	7.7%	28.8%
Brazil	11,299,131	25,922,085	50,130,779	6.4%	44.1%
Chile	1,397,031	4,564,440	10,856,431	8.9%	44.6%
Colombia	15,413,035	27,006,005	43,132,040	4.4%	2.0%
Cuba	9,159	2,364,015	3,614,912	28.3%	28,402.3%
Dominican Republic	718,346	1,627,870	2,903,338	6.0%	38.3%
Ecuador	4,707,453	7,373,744	10,521,871	3.4%	2.7%
Guyana, Suriname, French Guiana	1,651,698	2,144,034	2,814,052	2.2%	19.4%
Haiti	30,617	60,593	93,217	4.8%	26.3%
Mexico	98,536,416	198,990,801	329,908,894	5.2%	15.4%
Panama	408,345	459,400	730,542	2.5%	20.6%
Paraguay	38,673	90,040	174,208	6.5%	19.9%
Peru	1,210,074	2,202,251	3,428,301	4.4%	15.8%
Uruguay	63,971	110,308	198,647	4.8%	48.0%
Venezuela	66,346,218	123,507,852	180,220,713	4.3%	6.4%
Other Caribbean Islands	23,311,279	12,120,897	17,039,397	-1.3%	39.7%
Other Central America	4,240,433	7,758,730	12,295,129	4.5%	52.5%

All countries will experience faster growth under the High Case scenario. The six countries expected to gain the most from liberalization will have the highest gain in volume in 2020. Cuba's exports are forecast to be notably higher under free trade assumptions. The forecast methodology for Cuba resulted in total trade volumes increasing by 15870% in 2020, compared to Base Case forecasts of virtually no trade between Cuba and the U.S.

Manufactured commodities will experience the fastest gain over the Base Case forecast. By 2020, volumes of manufactured exports are forecast to be 42% higher than under the Base Case. In fact, these goods are very nearly the largest exports by volume under this scenario. Food products, apparel, electrical machinery, instruments, and miscellaneous manufacturing all were forecast to be 50% higher in 2020 under the full trade liberalization assumptions.

Air shipments will experience the fastest growth. Although airborne flows will still be a minor share of total exports by volume, the amount shipped by air will be 52% higher in 2020 under the High Case scenario. Waterborne exports will experience rapid growth as well, rising 44% above Base Case levels. Cross-border exports will be 27% higher in 2020.

Exhibit B2-11 and **Exhibit B2-12** report High Case forecasts for imports. Imports from Latin America will grow at an annual rate of 4.4% under High Case assumptions, compared to 3.8% under Base Case assumptions. The total import volume will be 16% higher in 2020 than under Base Case trade forecasts. Cuba again was forecast to experience spectacular growth under trade liberalization with the U.S., with imports growing at 28% per year.

Manufactured commodities again are forecast to experience the fastest growth under full trade liberalization. Volumes of manufactured imports in 2020 will be 43% higher than under the Base Case forecast. Food products, apparel, tobacco products, and miscellaneous freight will gain the most under free trade with Latin America.

It was assumed that crude oil and natural gas imports to the U.S. will not change under the High Case scenario of trade liberalization. For this reason, there is no percentage difference between the High Case forecast and the Base Case forecast in 2020.

As with exports, imports of goods by air will gain the most under the High Case forecast, rising to a volume of imports 49% higher in 2020 than in the Base Case trade forecast. However, cross-border imports are expected to gain more than waterborne imports. This results because the import commodities that are expected to gain the most under free trade are different from the export commodities most affected.

Exhibit B2-11
SOUTHEASTERN ALLIANCE GATEWAY EXPORTS TO LATIN AMERICA
HIGH CASE FORECAST, METRIC TONS

Commodity	1996	High: 2010	High: 2020	High: Average Annual Growth 96-20	% Difference from Base in 2020
Total All Commodities	**98,885,602**	**249,281,819**	**457,267,948**	**6.6%**	**34.1%**
Manufactured Commodities	21,052,288	71,167,755	151,038,008	8.6%	42.3%
Primary Commodities	41,714,220	92,143,560	157,465,448	5.7%	24.6%
Primary Manufactured Commodities	36,034,944	84,992,684	147,628,568	6.1%	37.3%
Crude Oil and Natural Gas	84,152	977,820	1,135,919	11.5%	27.8%

Exhibit B2-12
SOUTHEASTERN ALLIANCE GATEWAY IMPORTS FROM LATIN AMERICA
HIGH CASE FORECAST, METRIC TONS

Commodity	1996	High: 2010	High: 2020	High: Average Annual Growth 96-20	% Difference from Base in 2020
Total All Commodities	**241,036,076**	**426,062,372**	**681,643,141**	**4.4%**	**15.5%**
Manufactured Commodities	15,186,956	51,190,560	118,890,149	9.0%	43.2%
Primary Commodities	34,894,318	65,850,808	116,402,988	5.2%	30.2%
Primary Manufactured Commodities	50,490,101	68,229,013	113,426,552	3.4%	33.5%
Crude Oil and Natural Gas	140,464,704	240,792,016	332,923,424	3.7%	0.0%

SENSITIVITY ANALYSIS

As discussed, the High Case illustrates the impact of more favorable trade conditions on Latin American trade flows with the United States. Three additional scenarios were generated to examine the impact of changing some of the parameters used to determine the High Case.

A brief economic rationale was developed to support each of the scenarios generated by this sensitivity analysis. The rationale were strictly for expositional purposes and were not intended to imply that a comprehensive analysis was undertaken regarding the impact of each scenario. The first scenario considered a less optimistic trade outlook for Brazil than was envisioned in the High Case. The second scenario assumed that trade liberalization efforts would be less effective than the High Case scenario, while the third scenario assumed that Latin American transportation infrastructure will not be improved as rapidly as in the High Case. It should be noted that all three simulations considered higher levels of trade activity than the Base Case but that the level of activity possible in the High Case was constrained in some way. Effects of these alternative scenarios on the trade forecasts are compared in **Exhibit B2-13** and **Exhibit B2-14**.

Exhibit B2-13
COMPARISON OF HIGH CASE SCENARIOS
SOUTHEASTERN ALLIANCE GATEWAY EXPORTS TO LATIN AMERICA

Commodity	Annual Average Growth 96-20				
	Base	High Case	Brazil Scenario	Liberalization Scenario	Infrastructure Scenario
Total All Commodities	**5.3%**	**6.6%**	**6.1%**	**6.2%**	**6.1%**
Manufactured Commodities	7.0%	8.6%	8.1%	8.2%	8.0%
Primary Commodities	4.7%	5.7%	5.2%	5.4%	5.3%
Primary Manufactured Commodities	4.7%	6.1%	5.6%	5.7%	5.5%
Crude Oil and Natural Gas	10.3%	11.5%	10.9%	11.5%	11.0%

Commodity	% Difference from Base in 2020				
	Base	High Case	Brazil Scenario	Liberalization Scenario	Infrastructure Scenario
Total All Commodities	**0.0%**	**34.1%**	**21.2%**	**23.9%**	**20.7%**
Manufactured Commodities	0.0%	42.3%	29.3%	30.7%	26.1%
Primary Commodities	0.0%	24.6%	12.0%	16.9%	14.9%
Primary Manufactured Commodities	0.0%	37.3%	24.1%	25.5%	22.3%
Crude Oil and Natural Gas	0.0%	27.8%	13.9%	27.8%	15.6%

Exhibit B2-14
COMPARISON OF HIGH CASE SCENARIOS
SOUTHEASTERN ALLIANCE IMPORTS FROM LATIN AMERICA

Commodity	Annual Average Growth 96-20				
	Base	High Case	Brazil Scenario	Liberalization Scenario	Infrastructure Scenario
Total All Commodities	**3.8%**	**4.4%**	**4.2%**	**4.2%**	**4.2%**
Containerizable Commodities	7.3%	9.0%	8.5%	8.5%	8.4%
Bulk Commodities	4.0%	5.2%	4.7%	4.8%	4.7%
Break Bulk Commodities	2.2%	3.4%	3.0%	3.1%	2.9%
Crude Oil and Natural Gas	3.7%	3.7%	3.7%	3.7%	3.7%

Commodity	% Difference from Base in 2020				
	Base	High Case	Brazil Scenario	Liberalization Scenario	Infrastructure Scenario
Total All Commodities	**0.0%**	**15.5%**	**9.8%**	**10.5%**	**9.0%**
Containerizable Commodities	0.0%	43.2%	29.4%	30.3%	25.8%
Bulk Commodities	0.0%	30.2%	17.7%	19.5%	17.1%
Break Bulk Commodities	0.0%	33.5%	20.5%	22.7%	19.0%
Crude Oil and Natural Gas	0.0%	0.0%	0.0%	0.0%	0.0%

Note: Due to the assumption that crude oil and natural gas imports will not change under trade liberalization, neither the High Case nor alternative scenario forecasts differ from the Base Case.

Weak Brazilian Growth

Brazil has the largest economy in Latin America. High Case forecasts for Brazil indicate the economy should grow at 4.1% between 1996 and 2020. Brazilian economic performance is not, however, assured and any number of factors could reduce this level of activity. Any reduction in Brazil's economic activity would have widespread repercussions for the other countries in the region. This first scenario examining the sensitivity of the High Case results assuming that a smaller increase in country specific trade activity would take place than what was embodied in the High Case outlook.

Slower economic activity in Brazil will drop U.S. exports to this region from 5.1% per year in the High Case, to 4.7% annually, while import growth will fall from 6.4% to 6.0%. Many of the other major economies in Latin America also will slow their growth in trade with the U.S., particularly Mercosur countries and Mexico. In all, exports to Latin America will slow from 6.6% annual growth to 6.1% annual growth, and imports from Latin America will drop from 4.4% to 4.2% per year. Compared to other alternative scenarios, the effect of this scenario is a moderate reduction from the High Case. The exception is exports of primary commodities; growth for this commodity group will be reduced the most under this scenario. Trade in 2020 will be only two-thirds the projected volumes traded under the High Case.

Slower Trade Liberalization

The efficacy of trade liberalization efforts in the region over the next decade will have a bearing on the volume of trade that can be expected in the High Case. This second scenario examined the sensitivity of the High Case results to less optimistic assumptions for trade liberalization in the region and considered a smaller increase in commodity specific trade activity than was embodied in the High Case outlook.

Of the three scenarios, slower trade liberalization will dim the High Case scenario the least. Exports will fall from 6.4% annual growth under the High Case to 6.2%, while import growth will fall from 4.4% to 4.32% per annum. All countries will experience slower growth rates under this alternative scenario.

Slower Transportation Infrastructure Improvement

The volume of trade expected in the High Case can only be supported if transportation infrastructure in Latin America is improved significantly. If these improvements are delayed, specifically the privatization of port and railroads in Mexico and Brazil, bottlenecks will develop and trade in that region will fail to live up to its potential. The final scenario examined the sensitivity of the High Case results to a less pronounced rise in the time trend influencing trade than was embodied in the High Case outlook.

The slower transportation infrastructure improvement in Latin American countries has the potential to dampen growth the most from High Case projections. Exports in 2020 will be only 20.7% higher than the Base Case,

compared to 34.1% in the High Case forecast. Imports will be only 9% higher in 2020, two-thirds of the High Case forecast of 15.5% above Base Case levels. Inadequate infrastructure in Latin American economies will slow average annual growth in trade in each of the major economies by at least 0.5% per year.

MAJOR FINDINGS

The following are the major findings that resulted from the trade forecast analyses.

- Mexico's importance as a trading partner in Latin America will increase over the 24 year analyses period – from 44% of Latin American trade in 1996 to 54% in 2020 under the Base Case forecast.

- Manufactured goods – which have the highest value per ton and are the most easily transported in containers – will experience the fastest growth in both exports and imports. Total tonnage transported through the Southeastern Alliance will grow to more than five times its current levels by 2020.

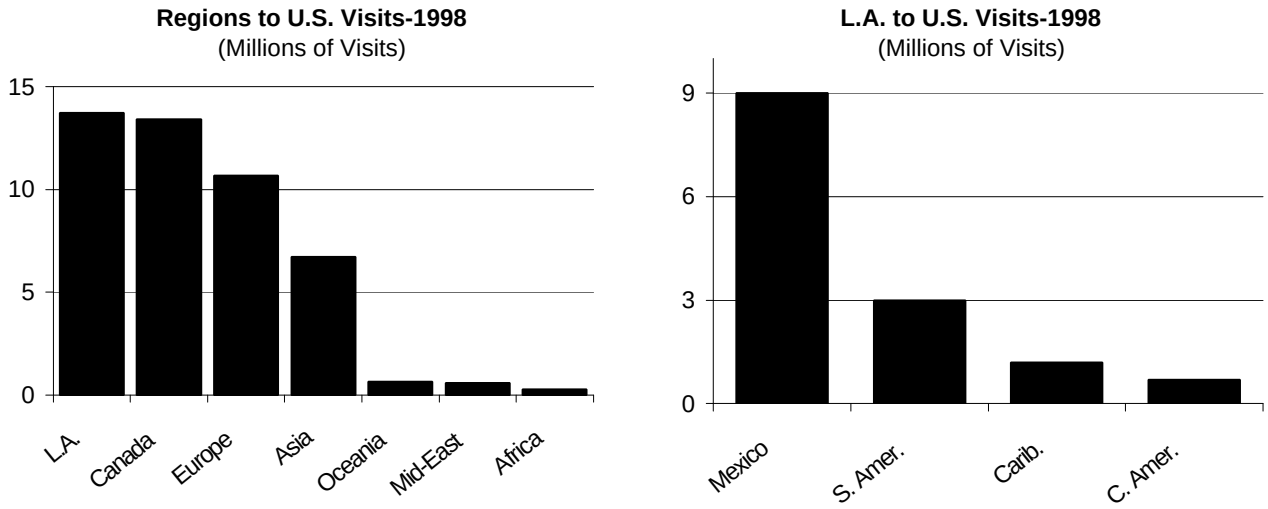
- Due to the rapid growth in trade with Mexico, land transportation will increase in the share of total trade from 20% in 1996 to 33% in 2020.

- Under a High Case trade forecast, the volume of trade to Latin America through the Southeastern Alliance gateways will increase to 1.1 billion metric tons in 2020, 22% more than the Base Case forecast for 2020.

LATIN AMERICAN TOURISM IN THE U.S.

Latin Americans visited the U.S. more than any other regional group in 1998 (**Exhibit B3-1**), with over 13 million visits, ahead of Canada and Europe. Tourist numbers from Mexico into the U.S. continued to rebound in 1998 as well, increasing by 10% and accounting for 9 million visits. Air travelers from Mexico increased by 9% for a total of 1.4 million visitors (Mexican air arrivals were the fifth largest market to the U.S.).

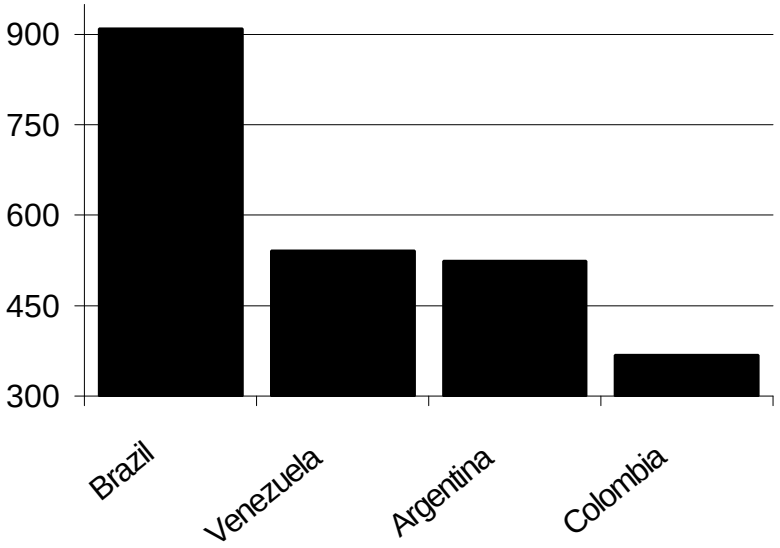
Exhibit B3-1
WORLD & LATIN AMERICAN VISITS TO THE U.S.



Source: Tourism Industries (TI)

South American visits—3 million total, a 4% increase—were higher than forecast in 1998, in spite of Brazil's economic trouble and weakened currency. Still over 900,000 Brazilians visited the U.S. in 1998, a 3% decrease from 1997, but not nearly as low as the anticipated 8% drop (**Exhibit B3-2**). Colombia and Venezuela each exceeded expected growth rates in visitation levels, up 16% and 11% respectively. Venezuela broke its 1982 record of 532,000 by sending 541,000 travelers to the U.S. in 1998. Additionally, Argentina's visitation increased by 4%.

Exhibit B3-2
SOUTH AMERICAN TO U.S. VISITS
(Thousands of Visits)



Source: Tourism Industries

Central American nations sent just under 700,000 visitors to the U.S. in 1998, up by 24%. The strongest growth came from Guatemala (22%), Costa Rica (19%), and El Salvador (46%). Lagging was the Caribbean region, down by 2% in 1998. However, the islands were still credited with about 1.2 million arrivals to the U.S.

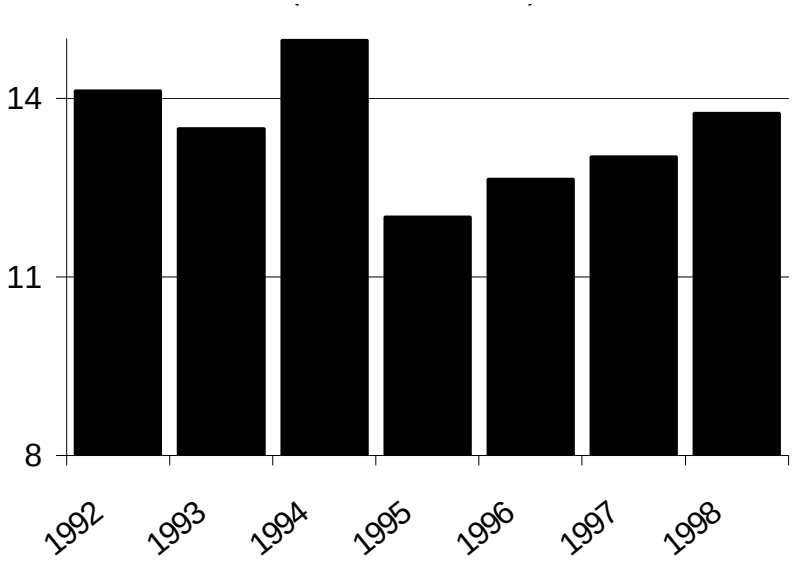
1990's Latin American Tourism in the U.S.

Historically, Latin Americans have visited the U.S. by the millions. From 1992 – 1998, the region sent at least twelve million travelers each year, peaking in 1994 at just under 15 million (**Exhibit B3-3**). After a dip in 1995 (during and immediately following Mexico's currency crisis), visits expanded once again to just under 14 million.

Tourism as an American Export

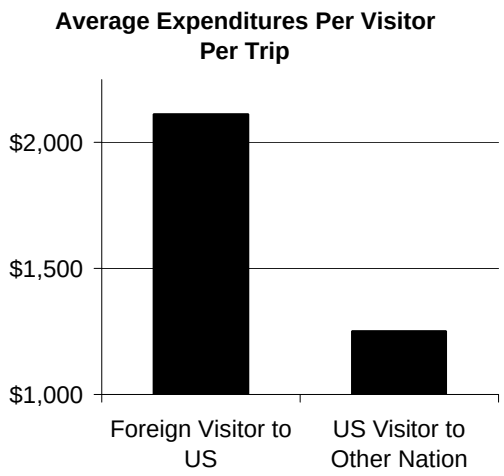
The U.S. is by far the leading country in travel receipts/travel exports. Of all world travel receipts, the U.S. took in 16%. International travelers spend at least two times more in the U.S. than in any other nation. International travel is ranked ahead of agriculture, chemicals, and motor vehicles on the list of U.S. exports. In contrast with many other trade categories, the U.S. has enjoyed a travel surplus for the past ten years (a surplus meaning that international visitors spent more in the U.S. than U.S. travelers spent elsewhere). This surplus was at $19 billion in 1998 even with a downturn in total arrivals to the U.S. **Exhibit B3-4** depicts the average expenditures of American travelers to other nations versus foreign travelers in the U.S., and provides a breakdown of which items foreign travelers spend their money on in the States.

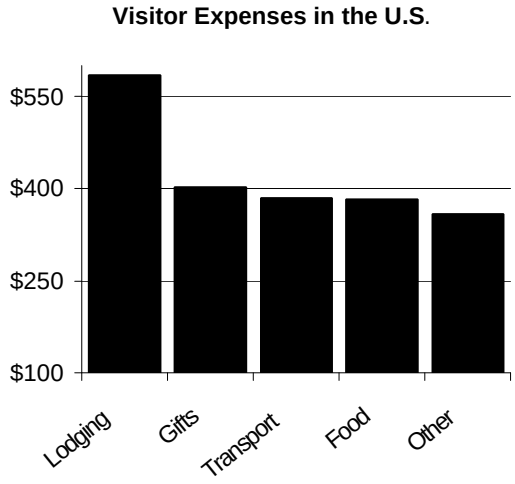
Exhibit B3-3
L.A. TO U.S. VISITS-HISTORICAL
(Millions of Visits)



Source: Tourism Industries

Exhibit B3-4
VISITOR EXPENDITURES





Source: Tourism Industries

Foreign visitors tend to spend the most on lodging while in the U.S., paying more than $550 per visitor per trip. While in the U.S., foreigners also spend around $400 per trip on each of four categories - gifts and souvenirs, transportation while in the U.S., food, and other items. Expenses while in America average about $2100 per visitor per trip for visitors, while Americans spend $1255 per visitor per trip abroad.

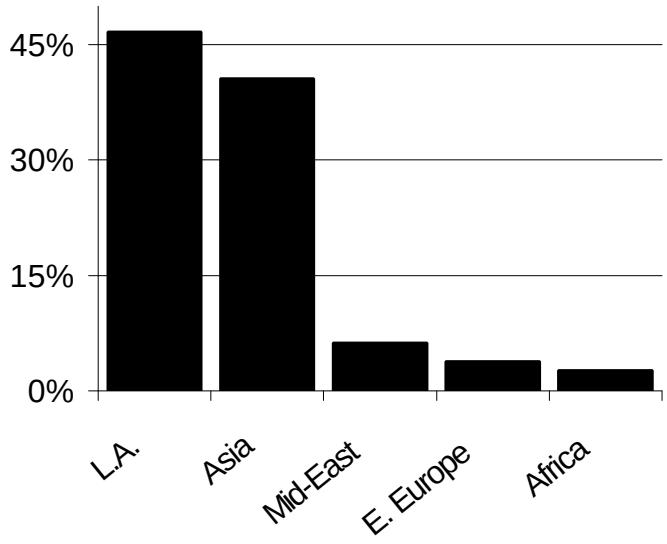
These numbers bode well for the U.S.' tourism market, and point toward strong travel-related markets. The Southeastern Alliance states, in particular, can benefit from such strong tourism numbers. The hotel/motel, restaurant, travel, and retail industries in Southeastern tourist destinations have enjoyed—and will likely continue to enjoy—great success as a result of international visitor spending.

LATIN AMERICAN TOURISTS AND THE SOUTHEASTERN ALLIANCE

Developing Regions' Travel to the Southeast

Having reviewed the state of the overall U.S. tourism industry, it is appropriate to consider the Southeastern Alliance specifically, and its relationship to Latin America. While Europeans make up by far a large majority of international travelers to the U.S. and the Southeast, an examination of the contribution of *developing regions* to travel in the Southeast shows that Latin America is the leader. As a percentage of developing regions' travelers, Latin America makes up over 45% (**Exhibit B3-5**). That is, after Western Europe and Canada, Latin America sends more visitors to the Alliance than any other area of the world, including the large Asian contingent.

Exhibit B3-5
SHARE OF DEVELOPING REGIONS' TRAVEL TO SE ALLIANCE

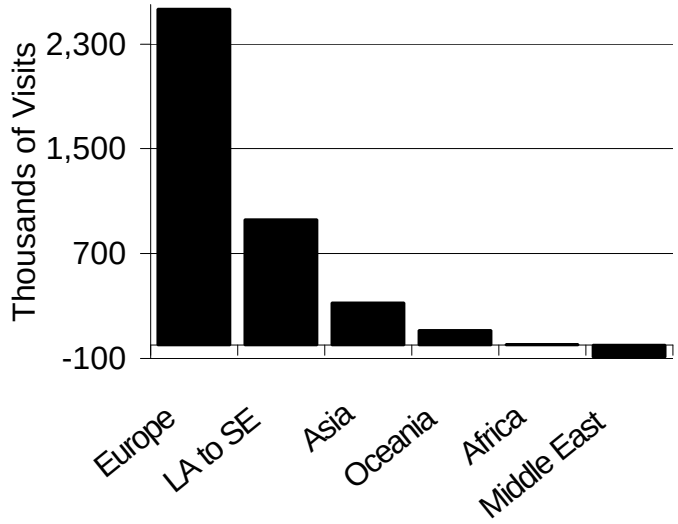


Source: Tourism Industries

The Balance of Visits

Like the U.S. as a whole, the Southeastern Alliance states enjoy a large positive balance of trade in tourism with every region of the world except the Middle East. Again, Europe represents far and away the largest travel surplus for the Alliance, but Latin American visits to the Southeast outnumbered Southeastern visits to Latin America by nearly one million in 1996 (**Exhibit B3-6**). Tourism Industries and U.S. Customs data indicate that this relationship has been the norm for many years—the Southeast Alliance is a very attractive destination for international travelers.

Exhibit B3-6
BALANCE OF VISITS-SE ALLIANCE vs. REGIONS 1996



Source: Tourism Industries

International Travelers to the SE Alliance

Tourism Industries, a division of the U.S. Department of Commerce, tracks the activities and interests of international travelers to the U.S. through its "Survey of International Air Travelers." Utilizing the survey results along with Customs international travel estimates, much can be learned about visitors to the Southeast Alliance. Information such as:

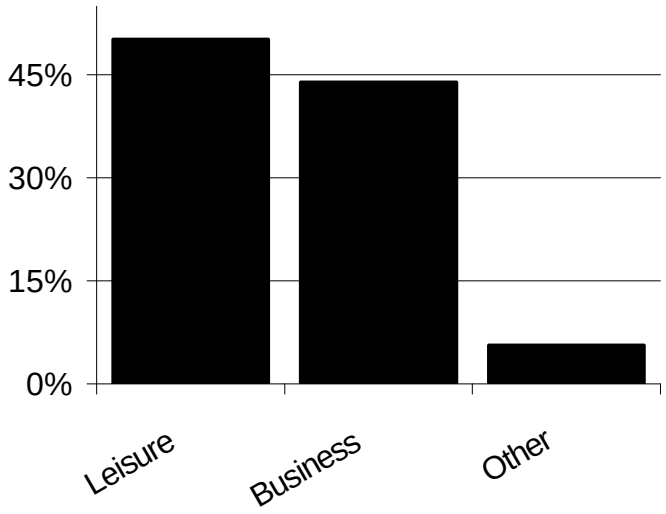
- The reason individuals are traveling (i.e., business, leisure, etc.)
- Which destinations people plan to visit
- Activities they plan to take part in (shopping, dining in restaurants, etc.)
- Occupation of visitors

By analyzing this information, a profile of the types of people travelling from Latin America to the Southeast can be developed. With the knowledge of the characteristics of their typical visitor, the Alliance may better be able to position itself as an international destination, particularly with Latin American travelers.

Main Purpose of Travel

When asked their main purpose of travelling to the Southeast, the majority (50.2%) of international travelers reported leisure activities—vacation or visiting family and friends—as their reason for travelling. The other major category of travel purpose was business and conventions at 44% (**Exhibit B3-7**).

Exhibit B3-7
MAIN PURPOSE OF TRIP – TRAVELERS TO SE ALLIANCE

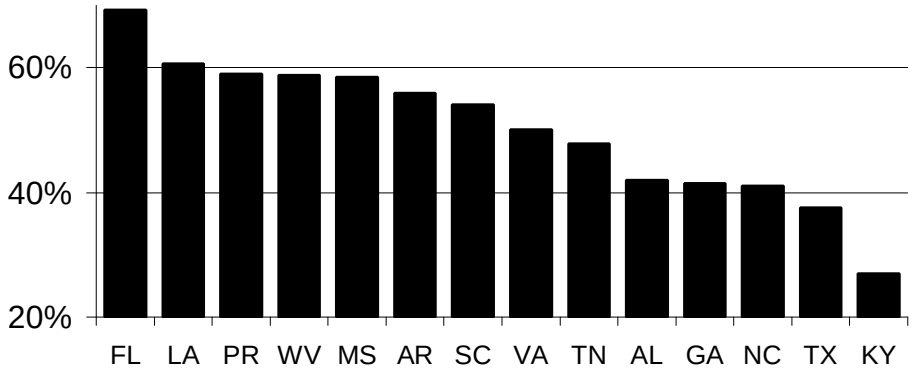


Source: Tourism Industries

Latin American Leisure Travelers

Within the Alliance states, there are some interesting comparisons that can be made regarding purpose of trip to a particular state**.** **Exhibit B3-8** presents estimates of the percentage of travelers stating leisure as their primary travel purpose in each of the fourteen Southeast Alliance states. As one might expect, visitors to Florida reported leisure travel at a significantly higher rate than any other (69%), followed by Louisiana and Puerto Rico.

Exhibit B3-8
PERCENTAGE PRIMARY PURPOSE - LEISURE

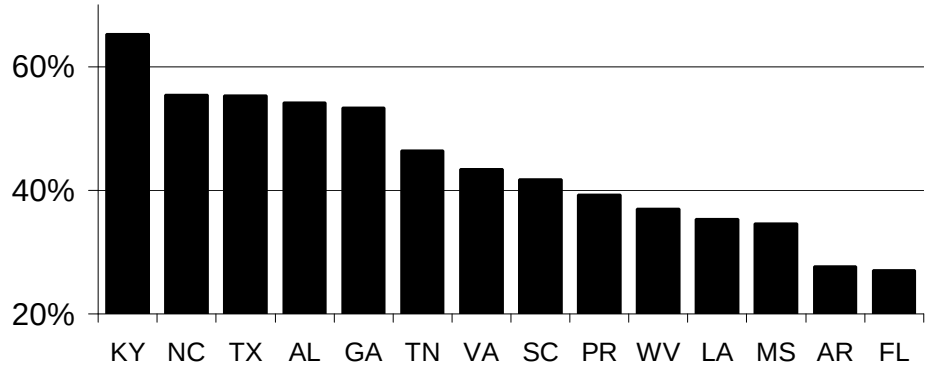


Source: Tourism Industries

Latin American Business Travelers

Alliance visitors' business travel percentages were highest in Kentucky, North Carolina, and Texas. The percentage of international travelers citing business as their main purpose was 65% in Kentucky, and 55% in North Carolina and Texas. Given the high percentage of leisure travelers, it is not surprising that Florida was a business destination for only 27% of its visitors (**Exhibit B3-9**).

Exhibit B3-9
PERCENTAGE PRIMARY PURPOSE - BUSINESS

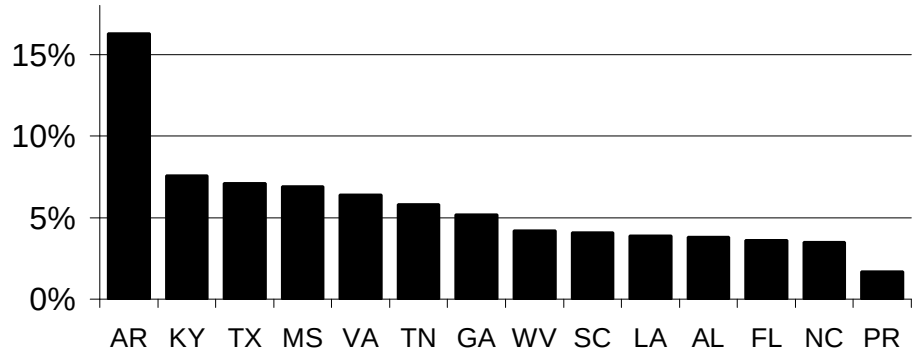


Source: Tourism Industries

Other Purpose Travelers

The Other Purpose category, consisting of study/teaching, government/military, religious, and health reasons, made up for the smallest portion of international visitors to Southeast Alliance states, with Arkansas the only state where these purposes constituted over 10% of travelers (**Exhibit B3-10**).

Exhibit B3-10
PERCENTAGE PRIMARY PURPOSE - OTHER



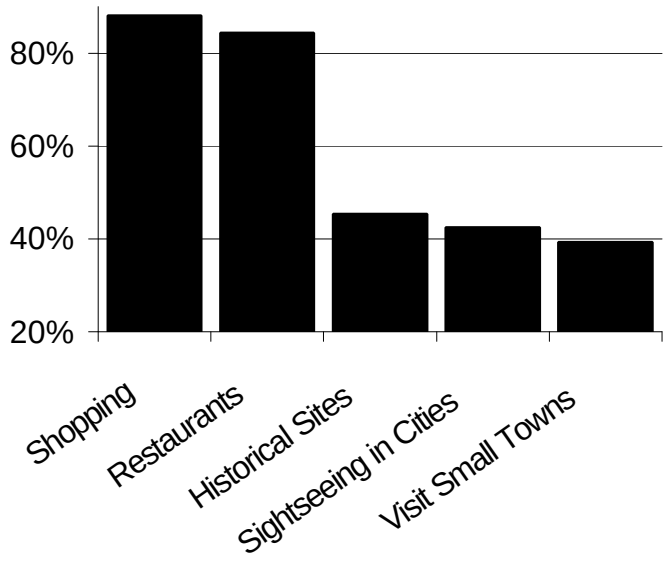
Source: Tourism Industries

The Tourism and Retail Trade Sector

From a broad perspective, these estimates provide an idea of what the majority of visitors might be interested in during their trip. But another category, Leisure Activities, focuses on the movements of travelers which may be of the most interest to the tourist industry in the Alliance. Visitors identified which types of leisure activities they took part in during their trip to an Alliance state (or states). Of the numerous potential categories, the top five are shown in **Exhibit B3-11**.

By far, retail shopping and dining in restaurants were the most commonly noted leisure activities. Nearly 90% of all international visitors to Southeast Alliance states reported that they had dined in restaurants and shopped in retail establishments.

Exhibit B3-11
SE VISITORS LEISURE ACTIVITIES

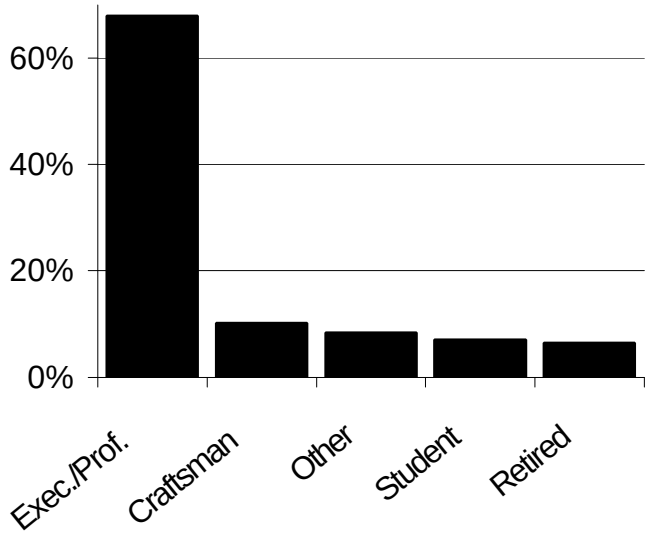


Source: Tourism Industries

Professional Demographics

Visitors to the Alliance are, by and large, Executives and Professionals. In fact, 68% of the region's international travelers come from the ranks of top level management or professional fields (**Exhibit B3-12**). Craftsmen, students, retirees, and others made up the remainder. The Alliance's tourism industries take advantage of this by targeting advertising to attract corporate travelers from the majority group of visitors, or to investigate the potential of improving markets such as retirees and others.

Exhibit B3-12
VISITOR OCCUPATIONS



Source: Tourism Industries

Nation of Residence

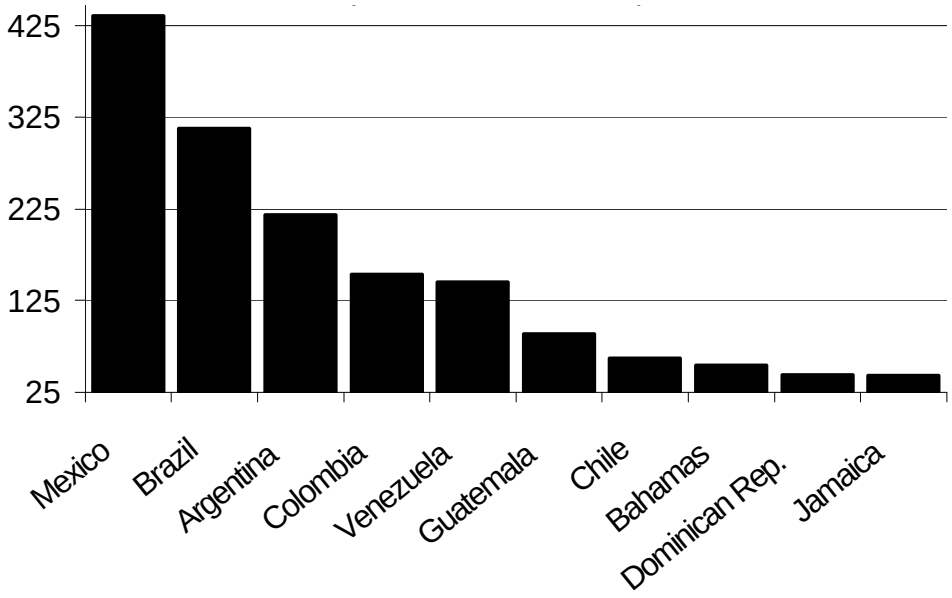
As was the case with the entire U.S., the Southeast Alliance draws the largest number of Latin American visits from Mexico. In 1996, over 425,000 visits were attributed to Mexico, followed by the South American nations of Brazil, Argentina, and Colombia (**Exhibit B3-13**). Mexico has of course become one of the U.S.' major trading partners since the advent of the North American Free Trade Agreement (NAFTA) in January of 1994, and this is evidenced strongly in the tourism trade from Mexico to the Southeastern Alliance.

BUSINESS AND SERVICES TRAVEL TO LATIN AMERICA

As Latin America grows economically and integrates advanced technologies into its culture, its countries will require the services of experienced firms to help smooth the transition. As a result, American professionals and technicians are working in nations south of the border more than ever. A particularly strong segment of trade between the U.S. and Central and South American partners is the Business Services category, which includes the professional services of consultants, engineers, telecommunications workers, and many others.

Nearly one out of every six Business Services dollars received by American companies in 1997 was spent by a Latin American company or government. Firms located in U.S. states have been sending their employees—ranging from high-level executives to technicians and craftsmen—to perform services in these nations in dramatically increasing numbers over the past decade.

Exhibit B3-13
TOP L.A. TRAVEL TO SE ALLIANCE-1996
(Thousands of Visits)



Source: Tourism Industries

INFRASTRUCTURE EXPANSION

While Latin America has increased its skill and technology base appreciably, in order to support the kinds of growth occurring there additional labor must be imported. Historically, developing nations have sought the services of international firms to accelerate the construction and expansion of infrastructure. Countries in regions such as Central and South America, Africa, and the Far East need improved communications, roads, and buildings before economic potential can be fully realized.

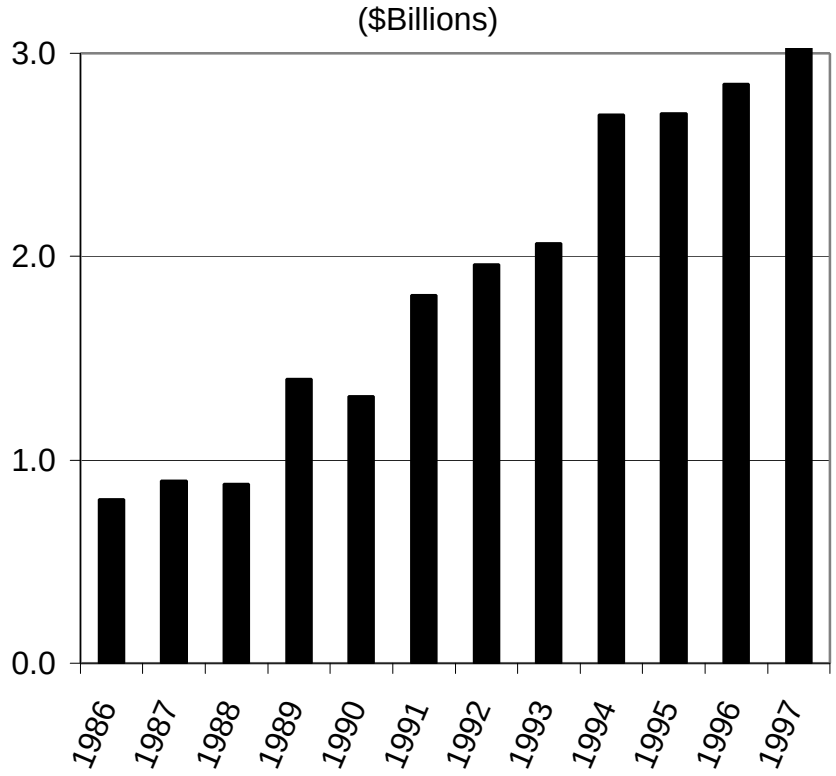
These infrastructure improvements are currently the driving force behind much of America's service exports. The two largest categories of services demand in Latin America are construction and equipment related. Architects, designers, and construction managers from the U.S. are involved in road construction as well as the design and build-up of industrial facilities. As producers purchase machinery and equipment, additional resources are required in the form of knowledgeable professionals who can aid in the installation, repair, and maintenance of the new capital stock.

BUSINESS SERVICES TRENDS AND DATA

Bureau of Economic Analysis (BEA) statistics provide a trade picture with respect to private services—particularly private business, professional, and technical services—that is emphatically in the favor of the U.S. Notably, business services receipts from Latin America have grown nearly every year since 1986, rising from

$807 million to over $3 billion in 1997 **(Exhibit B3-14**). This represents an average annual growth rate of about 25%.

Exhibit B3-14
U.S. SERVICES GROWTH IN LATIN AMERICA



Source: Bureau of Economic Analysis

MEXICO

In 1997, receipts from Mexico represented the largest portion of business service exports to Latin America, at $793 million. Our NAFTA partner to the south has been recovering steadily since the devaluation of the peso in 1995, which impacted Mexico's service imports adversely. The growing trade relationship with the U.S. and Canada continues to support the economy and drive demand for improved and expanded infrastructure.

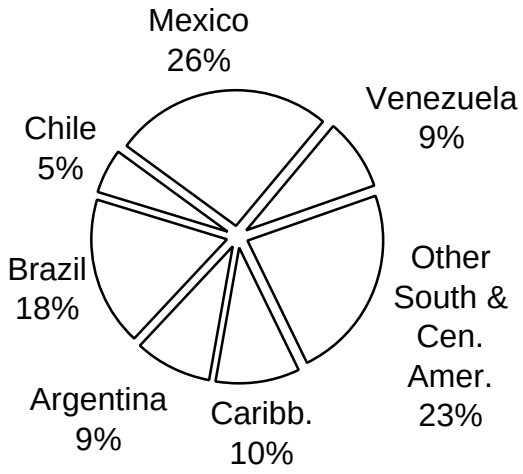
Mexico—one of the U.S.' top three trading partners internationally—spent $228 million on installation and maintenance of equipment in 1997, or 29% of its total business services purchased. Together with equipment maintenance, Mexico will likely continue to increase its purchases of construction, data, and other services.

Other Latin American Examples

The largest growth in services purchased from the U.S. has occurred in Brazil, Argentina, and Chile. Brazil, which imported $534 million in business and professional services in 1997, has increased its use of U.S. services by an average of 46% in the years 1986 – 1997. The market for business services in Argentina has grown about 44% per year in the same time span, reaching $282 million in 1997. Chile and Venezuela account for much of the remainder in services trade, at $162 and $264 million respectively in 1997.

Other Latin American nations are also investing heavily in American services (**Exhibit B3-15**). Venezuela paid $97 million for construction-related services from the U.S. in 1997, and Argentina spent $63 million on installation and maintenance of capital equipment.

Exhibit B3-15
1997 LATIN AMERICAN PURCHASES OF U.S. BUSINESS SERVICES



Source: Bureau of Economic Analysis

National Income Accounts Categories

"Business, Professional, and Technical Services" is one of several categories in the national income accounts for Private Services, each broken into receipts and payments. Categories for affiliated operations include those transactions that take place between U.S. parent companies and their affiliates abroad, and the transactions between foreign parent companies and their U.S. affiliates. There are also categories for unaffiliated businesses, including education, financial services, insurance, telecommunications, film & tape rentals, and other.

The Business Services category is broken down into several more detailed classifications. Each of these is listed by receipts and payments. The categories of Business Services are:

- Construction, Engineering, Architectural, and Mining
- Equipment Installation, Repair, and Maintenance
- Computer and Data Processing
- Consulting and Public Relations
- Research and Development
- Database and Information Services
- Legal Services
- Industrial Engineering
- Advertising

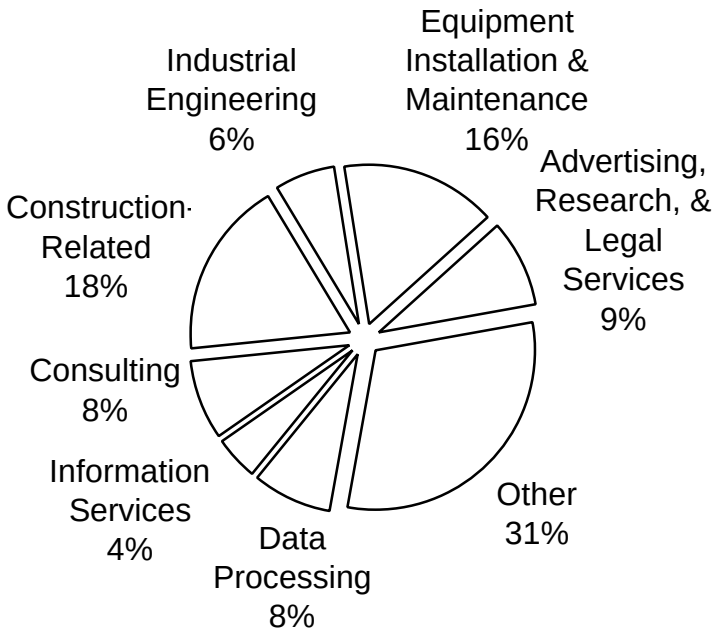
Business Services receipts from Latin American countries came largely from four categories. Construction, Engineering, Architecture, and Mining accounted for 18% of Business Services exports to the region in 1997. Installation, Maintenance, and Repair of Equipment followed with a 16% share, along with Management Consulting and Data Processing, each providing an 8% share.

The large proportion of receipts from these categories is not surprising, given the nature of growth occurring in these nations. As developing countries expand their economies, they necessarily must increase the level of capital stock (i.e., buildings, roads, equipment, etc.).

MANAGEMENT EXPERTISE

The Management Consulting and Data Processing categories are keys to the facilitation of development (**Exhibit B3-16**). As a group of developing nations, Latin America has not progressed to the point of having an experienced—or technologically advanced—labor pool. In order to plan for the future and manage change, these countries have tapped into the U.S.' management consulting industry. This has been particularly true in Brazil, where Management Consulting receipts to U.S. firms made up 13% of Business Services—Brazilian companies spent $69 million dollars on consulting and public relations services from America in 1997 alone. Brazil's services market was also heavily invested in Data Processing services (17% of all professional services purchased by Brazil from the U.S.)—spending over $90 million in 1997.

Exhibit B3-16
1997 U.S. BUSINESS SERVICES DEMAND IN LATIN AMERICA



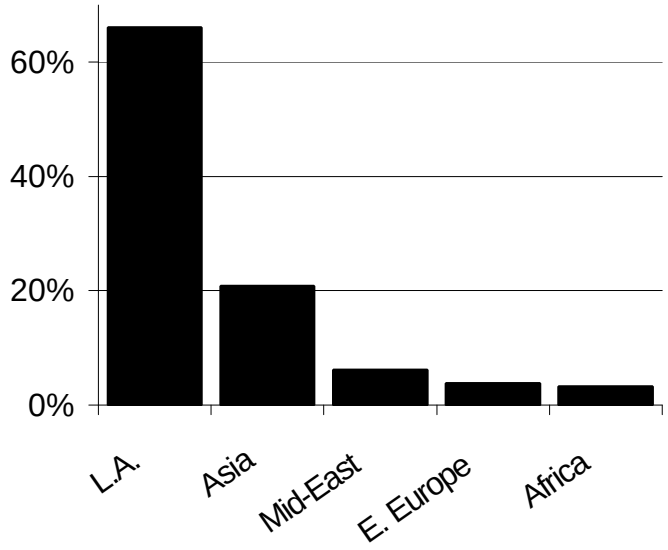
Source: Bureau of Economic Analysis

Clearly, professionals from a variety of American services industries are expending a great deal of effort in the nations of Latin America, and bringing in significant receipts. As this region continues to grow, the demand for their services can be expected to do likewise. To meet the needs of capital stock expansion, technological advancement, and growth management, U.S. firms will necessarily play a large role in Central and South American business for the foreseeable future.

SOUTHEASTERN ALLIANCE TRAVEL TO DEVELOPING REGIONS

In terms of visits to developing regions, Alliance travelers go to Latin America more than any other area. Percentage-wise, 66% of American visits to developing nations are to Latin America, with the next closest region being Asia at 21% (**Exhibit B3-17**). Given the Services Trade data provided by the BEA, and these estimates from Tourism Industries, it can be supposed that a great deal of business services travel is bound for developing regions such as Latin America.

Exhibit B3-17
SHARE OF ALLIANCE TRAVEL TO DEVELOPING REGIONS



Source: Tourism Industries

Purpose of Southeastern Alliance Travel

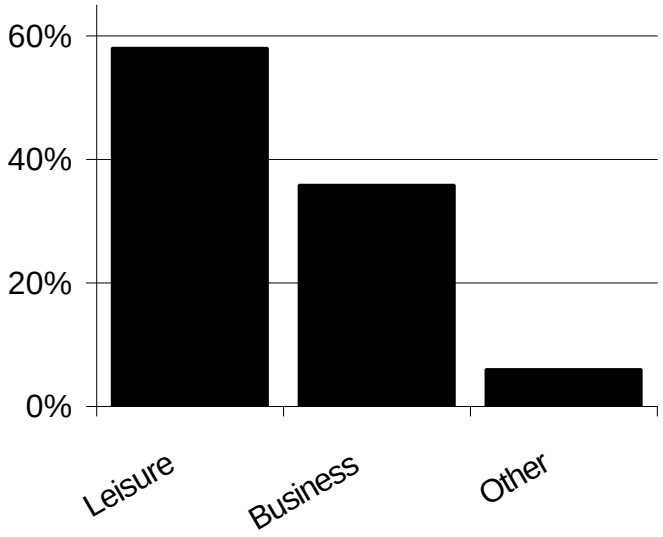
Travelers from the Southeastern Alliance states reported that the main purpose of their visit was business 36% of the time, leisure about 58% of the time, and 6% for other reasons (**Exhibit B3-18**). In 1996, an estimated 960,000 business visits went from the Alliance to Latin America. This represents an increase of over 100,000 visits from 1993. (**Exhibit B3-19**)

Business travelers from the Southeastern Alliance varied by percent from particular states. The majority of travelers from Arkansas (53%) reported business travel as the main purpose of their trip, followed by Louisiana (43%) and Mississippi (40%) (**Exhibit B3-20**). Beyond those states, every other member of the Alliance sent at least 25% of its international visitors for business purposes.

INTERNATIONAL LEISURE TRAVEL FROM THE SOUTHEAST

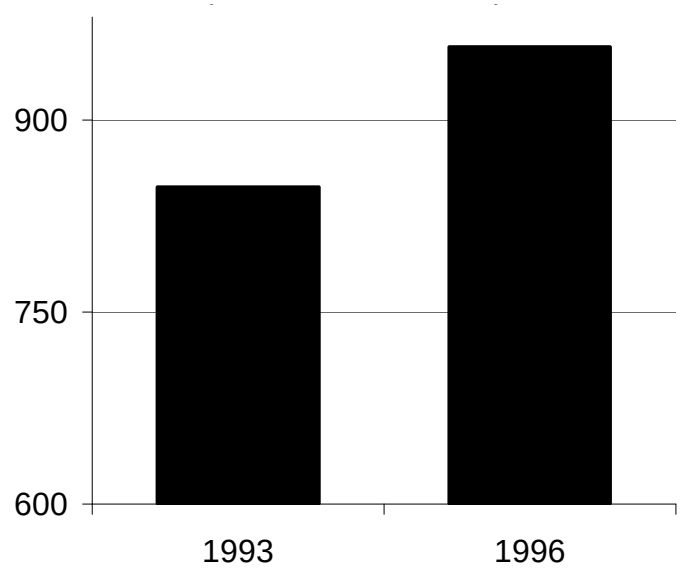
There is somewhat less variance between the states where leisure travel percentages are concerned. West Virginia and South Carolina had the highest percentages of leisure travelers on international trips, with 71 and 66 percent, respectively (**Exhibit B3-21**). The remainder of the Alliance ranged from 40 – 65%.

Exhibit B3-18
ALLIANCE TRAVELERS' MAIN PURPOSE OF VISIT



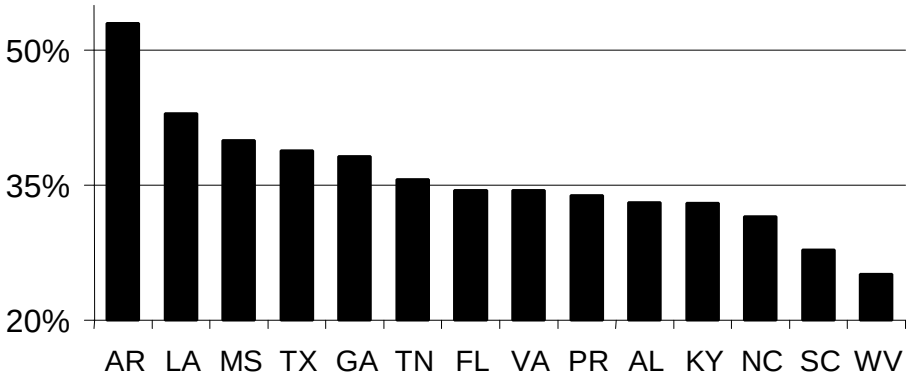
Source: Tourism Industries

Exhibit B3-19
SE BUSINESS TRAVEL TO LATIN AMERICA
(Thousands of Visits)



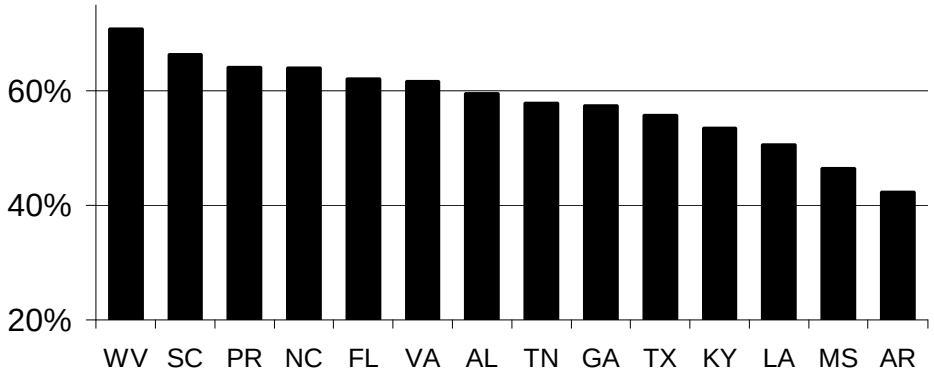
Source: Tourism Industries

Exhibit B3-20
PERCENT OF SE TRAVELERS ON BUSINESS



Source: Tourism Industries

Exhibit B3-21
PERCENT OF SE TRAVELERS FOR LEISURE

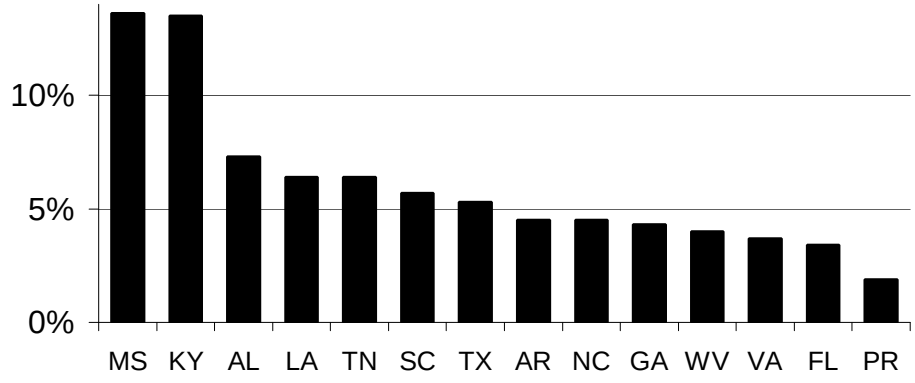


Source: Tourism Industries

Other Purpose Travelers

The remainder of Alliance international visits were reported as being for other purposes. Again, this amounts to a small minority of travelers. Mississippi and Kentucky, at about 13%, had the highest percentage of "other" purpose visits (**Exhibit B3-22**).

Exhibit B3-22
PERCENT OF SE TRAVELERS FOR OTHER PURPOSE

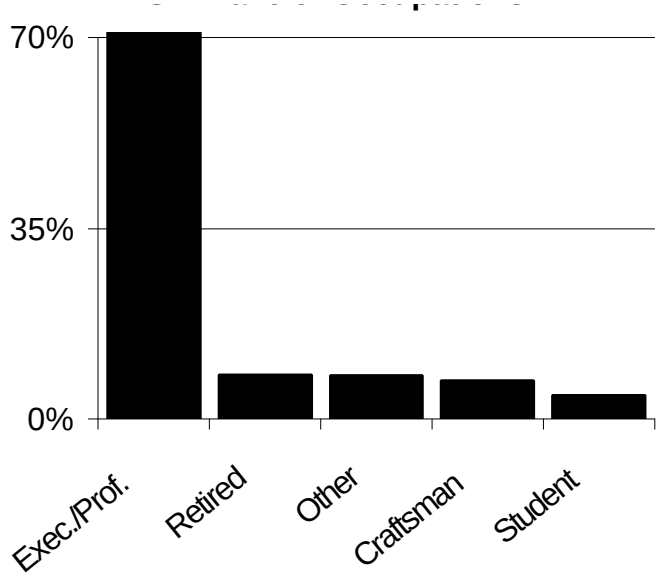


Source: Tourism Industries

ALLIANCE TRAVELERS' OCCUPATIONAL PROFILE

Most of the Alliance's international travelers reported that their occupation was Executive or Professional level. Over 72% of Southeastern international air passengers fall into this category, followed distantly by retirees, craftsmen, students, and others (**Exhibit B3-23**). Given that such a large percentage of passengers are executives and professionals, and that a substantial percentage are on business trips, a possibility is that Alliance businesses are sending a great deal of high-skilled, highly-paid labor to Latin America. This is consistent with the BEA statistics and the U.S.' surplus in Business Services trade.

Exhibit B3-23
SE TRAVELER OCCUPATIONS

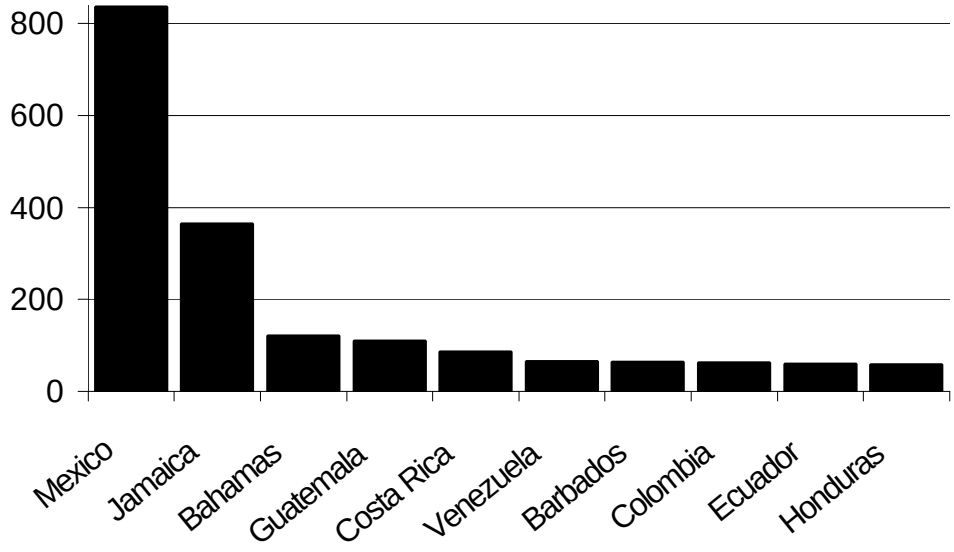


Source: Tourism Industries

Primary Destinations of SE Travel

For reasons of geography and economy, by far the largest number of Alliance residents travel to Mexico as a Latin American destination. In 1996, Mexico led Latin America countries with over 800,000 Southeastern Alliance visits (**Exhibit B3-24**).

Exhibit B3-24
TOP L.A. DESTINATIONS OF SE ALLIANCE-1996
(Thousands of Visits)



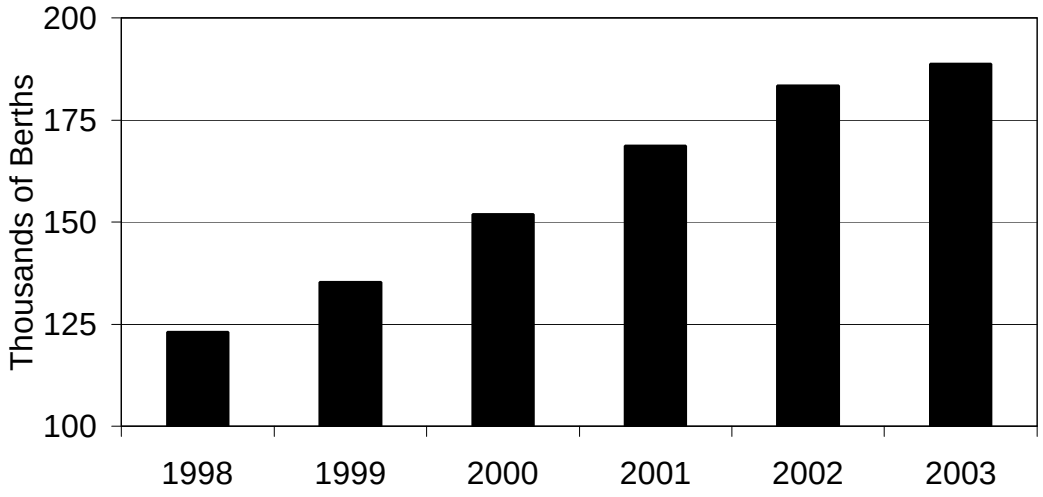
Source: Tourism Industries

CRUISE INDUSTRY

The *Cruise Industry News 1999 Annual* describes 1998 as "the best year the industry has ever had." The top cruise line companies are remarkably strong financially, with market power and economies of scale on their side. Given these factors, cruise lines can control prices to a greater degree than ever before. Being able to control price is crucial to controlling cabin bookings. By lowering or raising prices, cruise lines can push demand up or down in efforts to maintain full ships (Cruise Industry News).

As the North American market for cruising grows, so will the fleet of ships. The 1999 North American cruise fleet was estimated to include 127 ships, and is expected to grow to 163 ships by 2003. This represents an increase in berths from 135,000 to nearly 190,000 (**Exhibit B3-25**).

Exhibit B3-25
INCREASE IN NORTH AMERICAN CRUISE BERTHS



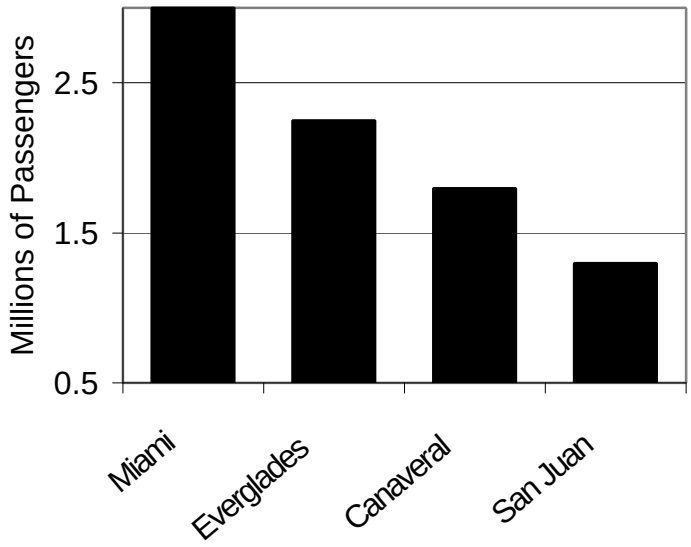
Source: Cruise Industry News

SOUTHERN CRUISE PORTS

The cruise industry has grown steadily in recent years, and is projected to continue to serve millions of North American passengers in the future. The three busiest cruise ports in the United States are located in Florida: Port of Miami served 3 million passengers in 1998, Port Everglades 2.25 million, and Port Canaveral 1.8 million. San Juan, Puerto Rico's port was fourth in North American passengers with 1.3 million. (**Exhibit B3-26**) New Orleans, Tampa, and Newport News (VA) also have busy cruise services. Port of Houston, Port Manatee (Tampa area), and Key West serve cruise ships, though Key West is strictly a port-of-call (meaning ships dock for a brief time and depart, not usually taking on new passengers). Other southern port cities, including Charleston

(SC), Jacksonville (FL), and Gulfport (MS), hope to attract more cruise business in the near future.

Exhibit B3-26
TOP NORTH AMERICAN CRUISE PORTS



Source: Cruise Industry News

CHARACTERISTICS AFFECTING CRUISE PORT SUCCESS

In order for a cruise port to be successful, certain attributes should be in place in the port city. These include:

- Port must be within a reasonable distance of cruise destinations;
- Extensive airline service must be available;
- The surrounding area should offer local complementary attractions;
- The metropolitan area must provide a significant population base; and
- The port's physical attributes must be appropriate to cruise ships.

Cruise Destinations

Most busy cruise ports and their surrounding areas have several of the above features in common. One of these is proximity to cruise destinations of interest. The port must be located such that several attractive ports-of-call are within a few days' cruising distance. The reason for this is that the largest segment of the cruise passenger market prefers cruises of between two and seven days. Ten-day, two week, and even longer cruises are available, but are not nearly as popular as the shorter trips. For this reason, most cruise lines choose to operate out of ports that allow for flexible scheduling of several ports-of-call.

Port Calls

Largely because of geography, U.S. ports located in the Gulf of Mexico send cruises to the Western Caribbean and Mexico, including: Playa del Carmen, Cozumel, Grand Cayman, and Cancun. Ports located on the Atlantic are home to ships that visit more eastern destinations such as: the Bahamas, Bermuda, Puerto Rico, and the U.S. Virgin Islands (**Exhibit B3-27**). This distribution of cruise itineraries supports the logic of cruise ports locating within a reasonable cruising distance of ports-of-call. When departing from the Tampa or New Orleans area, the Western Caribbean logically provides a ship's destinations. Ships leaving Miami and Port Everglades are best able to visit Eastern Caribbean islands.

Airline Service and Arrival Modes

Also of importance to cruise ports and cruise lines is accessibility to passengers, particularly by air and highway. There are two primary types of cruise passengers in terms of travel to departure ports—"drive-ins" and "fly-ins." Both are important to cruise line operators, so accommodations must be available so that either mode may be reasonably utilized. This means that cruise ports that are to be successful must be relatively close to an airport with extensive major carrier service. Also, passengers who wish to drive to a port from surrounding cities and states must have direct interstate and highway routes to travel, and ample parking facilities available upon arrival.

Local Complementary Attractions

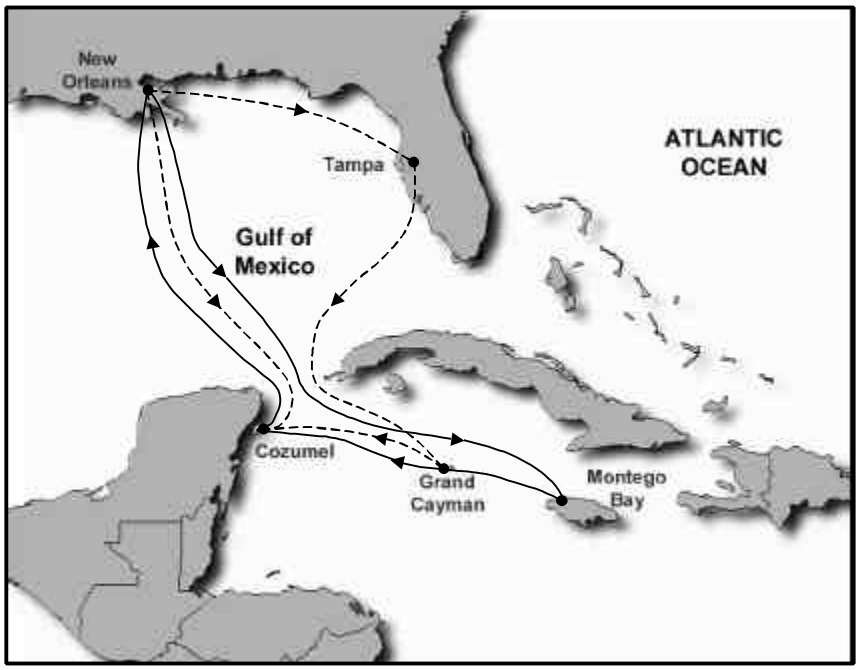
Port cities with local complementary attractions are more likely to be successful in arranging for cruise ships to set up a homeport or port-of-call. There are a couple of reasons for this. First, many vacation packages include days in the port city just before or after a cruise.

Secondly, a city with attractions apart from cruising will be more likely to generate visits by vacationers who may potentially become cruise passengers. For instance, New Orleans offers a wide variety of activities to tourists and is a destination in its own right. Therefore, it meets the criterion of having local complementary attractions—many passengers come to New Orleans for a number of days prior to embarkation, or remain in New Orleans after disembarking. This makes it more viable in the eyes of cruise lines.

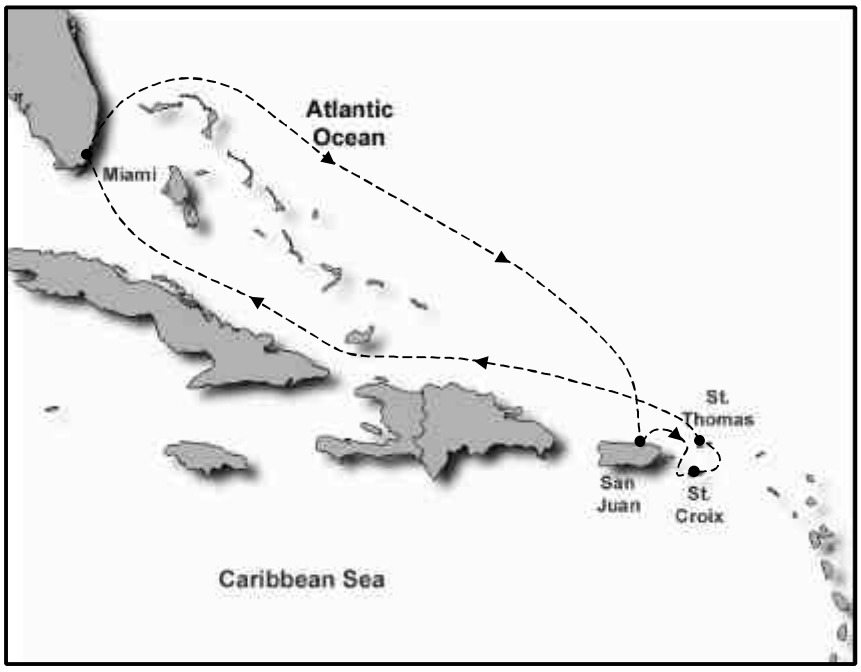
U.S. Ports of Call

In fact, New Orleans is one of only a handful of U.S. cities that can claim to be a genuine port-of-call for cruises calling from other domestic ports. Key West, Boston, and New York City are among the other ports that attract cruise ship calls. The reason for this is that tourist attractions are more numerous and readily available from ships in port than in many other cities. This is not to say that other port cities do not have local attractions—Miami, Port Everglades, Port Canaveral, and Port of Tampa, to name a few, all have wonderful local destinations including:

Exhibit B3-27
EXAMPLE CRUISE ROUTES AND PORTS OF CALL



Western Caribbean Cruise Route Examples



Eastern Caribbean Cruise Route Example

Source: Carnival Cruise Lines

- Beaches
- Natural beauty and wildlife
- Theme parks
- Professional sports

METROPOLITAN POPULATION

A local population base is also an asset for a cruise port's surrounding areas. Having a significant population base provides a ready market from which to draw cruise customers. Moreover, port facilities require a labor pool from which to employ local staff, such as sales people, customer service, dockworkers, maintenance technicians, and a variety of other positions. Cities with large populations are more likely to have such labor resources. Additionally, a large population usually assures the presence of other services and capabilities, such as airports, roads, hotels, restaurants, etc. that are important to cruise travelers.

Infrastructure

Finally, the physical characteristics of the port itself are obviously of paramount importance—if the proper infrastructure is not in place, a port simply cannot serve cruise ships. The two most basic factors associated with port operations are water depth and height restrictions (primarily due to existing bridges). In spite of the gigantic size of many cruise ships, they generally only require between 27 and 30 feet of water to operate safely. However, because most of the boat is above water, height clearance prevents some ships from getting into certain ports, as many cruise vessels are 150 to 200 feet tall. (**Exhibit B3-28**)

Exhibit B3-28
MAJOR SOUTHEASTERN PORT FACILITIES

	Cruise Ship Berths/Terminals	Water Depth
Miami	12	25-42 ft
Everglades	10	31-44 ft
Canaveral	7	39 ft
San Juan	9	19-35 ft

Challenges to Establishing a Cruise Port

For ports to add berths to accommodate cruise ships, they occasionally must dig deeper channels and docking areas. This results in further obstacles associated with changes to the environment: damage must be minimized, and the appropriate permits and right-of-way are often difficult to acquire. Assuming water depth and bridge heights are not problematic, ports must still provide a great deal of infrastructure to support cruise activity. Though dimensions vary widely, today's ships often need in the neighborhood of 1,000 feet of dock length. Docks must meet a variety of specifications, including height, width, and length of ships to be berthed. In addition to docking facilities, ports must provide adequate

parking garage space, comfortable passenger terminals, and roadways and infrastructure through the port itself.

Scheduling and Logistics

With a few of exceptions, cruises depart and return on Friday, Saturday, or Sunday. Because of this, most U.S. cruise ports have excess ship berths during the other days of the week, with few vacancies on weekends. The other side of the equation, though, is that port space in some of the small island destinations is scarce and highly valued during the weekdays (when cruise ships are making calls). On weekends, these same ports are often empty because the ships have returned to homeports in the U.S. to disembark and embark passengers.

Capital Investment

The addition of a new berth space for a cruise ship is a costly undertaking. Port operators estimate $3 to $4 million for the construction of wharf (dock) facilities, $10 to $20 million for a state of the art terminal, $5 to $10 million for a parking garage, and $5 to $10 million for new roadways and infrastructure. Of course these figures vary from project to project, and do not include costs of maintenance or dredging and digging in a harbor, but the capital costs alone for a top of the line cruise ship berth and facility could be as much as $40 to $50 million.

SOUTHEASTERN ALLIANCE CRUISE GROWTH

Many of the North American cities with the greatest potential for increasing their cruise business are located within the Southeastern Alliance (**Exhibit B3-29**). While the Alliance already claims the busiest American cruise ports, it also encompasses the majority of future growth ports for the cruise industry in North America as forecast by *Cruise Industry News Annual 1999.* Nine of the fourteen North American ports expected to expand their scopes of services are located in Alliance states, indicating not only the current strength of the cruise industry in the Southeast, but also its strong projected future position.

Exhibit B3-29
PROJECTED NORTH AMERICAN CRUISE GROWTH PORTS

1) **Port of Palm Beach, FL**	8) **Houston, TX**
2) **Port of Mobile, AL**	9) **Port Manatee, FL**
3) **Charleston, SC**	10) **Gulfport, MS**
4) Philadelphia, PA	11) Port of Halifax, CN
5) Port of Seattle, WA	12) San Francisco, CA
6) Port of Quebec City, CN	13) **Corpus Christi, TX**
7) Hampton Roads, VA	14) **Port of New Orleans, LA**

Note: Ports in bold type are included in the LATTS Strategic Port System discussed in Section C1.

SECTION B4
ECONOMIC DEVELOPMENT IMPACT OF LATIN AMERICAN TRADE

The effect of Latin American trade on the Southeastern Alliance's economic development will be significant. In turn, the growth of trade between Latin America and the Southeastern U.S. will have profound effects on the transportation infrastructure—and therefore economic development in general—of the Region. The increase in freight traffic will directly impact ports, highways, railways, and airports.

A large majority of the world's economies have liberalized trade policies in an effort to counteract the stifling effects of past protectionist attitudes. As free trade agreements like North American Free Trade Agreement (NAFTA) and General Agreement on Tariffs and Trade (GATT) accelerate international trade in the Western Hemisphere, the Southeastern Alliance states need strategies not only to capitalize on trade but also to ensure that needed infrastructure is in place. Even a large, developed economy such as that of the Alliance must be prepared to accommodate increased trade in order for its citizens to benefit optimally from international market opportunities.

In the interest of furthering the economies of Alliance states, policymakers should be familiar with the global marketplace as it applies to their Region. Of particular importance are three key relationships:

- The Southeastern Alliance's profile as a U.S. economic region
- International trade relationships, and how they are expected to change
- Alternative trade scenarios, and projected impacts on Southeast domestic employment and productivity

SUMMARY OF ECONOMIC DEVELOPMENT IMPACTS

The Southeastern Alliance states, taken as a group, had the largest combined Real Gross State Product (GSP) of any area of the U.S. At over $2 trillion, the Alliance's GSP was considerably larger than that of the North Atlantic, Central, Southwest, and Northwest (**Exhibit B4-1**).

As a percentage of the U.S.' total real GDP, the Southeastern Alliance made up about 29%, with the next closest region being the North Atlantic with 24% of the total (**Exhibit B4-2**). These facts indicate the standing of the Southeastern Alliance as a potent economic entity in its own right. While the Region is not at the top of every single growth category, the volume of production accounted for by Alliance states makes it a powerful international player.

Exhibit B4-1
REAL GSP OF U.S. REGIONS – 1997
(Billions $'92)

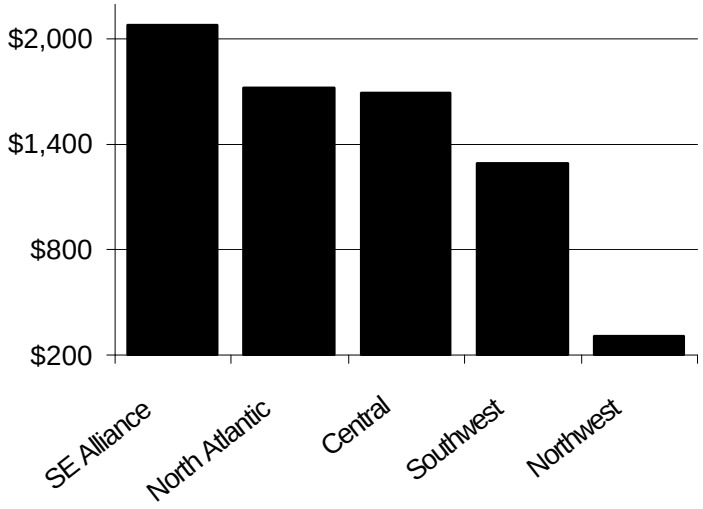
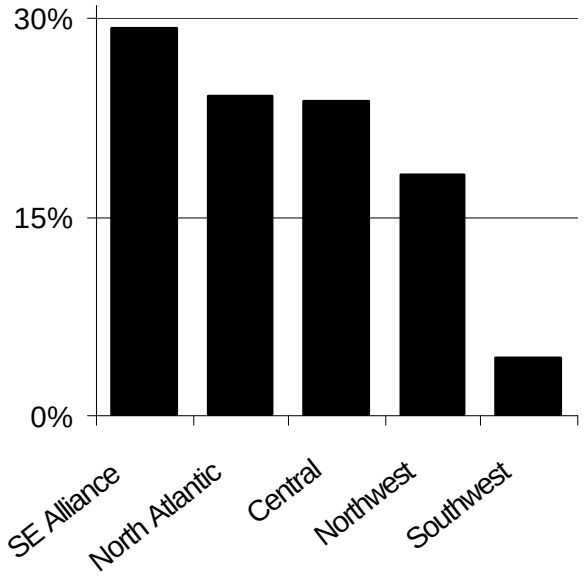
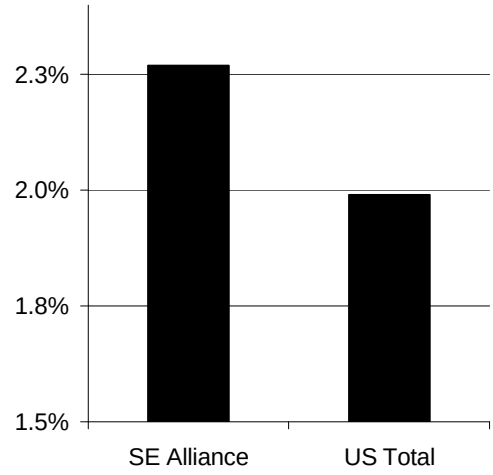


Exhibit B4-2
PERCENT OF U.S. GDP – 1997



In terms of GSP growth, Alliance states are forecast to grow at an impressive rate—one that is notably above the U.S. Total GDP growth (**Exhibit B4-3**). This is an indication that not only is the Southeast a large and prosperous region in terms of annual production, but the Region's productivity is also growing faster than most of the remainder of the nation.

Exhibit B4-3
GSP ANNUAL PROJECTED GROWTH, 1997-2020



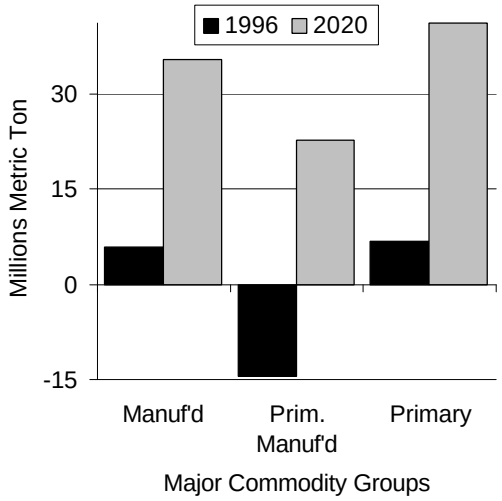
The combination of a large developed regional economy with projected growth higher than the remainder of the nation makes the Southeastern Alliance an attractive trade partner for Latin American nations hoping to sustain and improve their positions as developing national economies. Such nations can realize substantial gains from trading with Alliance members who provide markets for goods as well as sources of capital investment dollars.

Summary of Trade Relationships

A key determinant of the Southeastern Alliance's ability to maintain the momentum of the current cycle of economic development will be its ability to develop a strong and constructive role in the ongoing integration of the Western Hemisphere's economy. The Alliance's trade relationships with Latin America provide insights into the role that it may play over the next couple of decades, particularly when looking at projections of future trade balances.

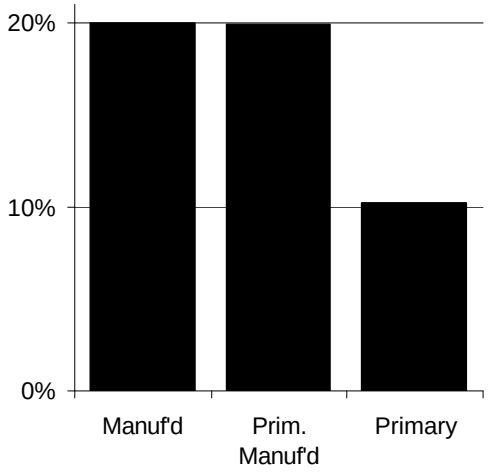
There are many product categories in which the Southeastern Alliance will either increase an already positive trade balance or convert a negative balance into a positive one. While negative trade balances in oil, gas, and other natural resources are unlikely to diminish, the Alliance stands to improve its position considerably in the trade of Manufactured, Primary Manufactured, and Primary Commodities between now and 2020 (**Exhibit B4-4**).

Exhibit B4-4
ALLIANCE TRADE BALANCES WITH LATIN AMERICA



The projections for trade relationships with Latin America in the early 21st century suggest annual improvements in each of these commodity groups of between ten to twenty percent (**Exhibit B4-5**). Given this type of annual growth in trade balances, the Southeastern Alliance clearly stands to profit from growth in international trade. Again, growth in trade and trade balances adds emphasis to the necessity of evaluating and upgrading trade infrastructure throughout the Region.

Exhibit B4-5
PROJECTED ANNUAL CHANGE IN TRADE BALANCES
1996 – 2020



Summary of Economic Impacts of Trade with Latin America

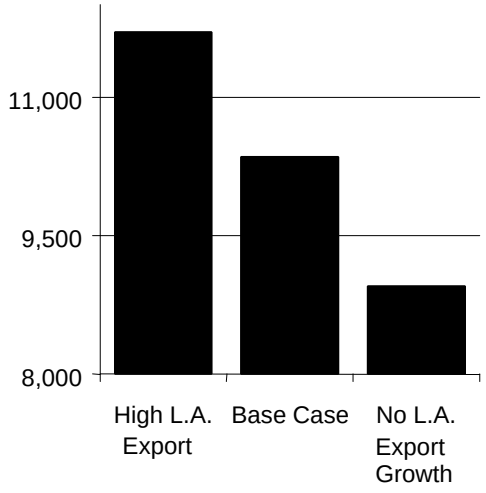
Trade with Latin America leads to additional jobs for the people of the Southeastern Alliance. Given the Region's position in the Western Hemisphere's economy, these jobs are likely to be created in value-added industries and in the higher wage occupations within those industries. Using a system of macroeconomic models, simulations were undertaken to predict the impact of Latin American trade on the Alliance. By choosing some potential scenarios for trade, levels of Southeastern Region employment were compared for different trade schemes.

Three of these scenarios were:

- Base Case – predicts employment if current trade conditions with Latin America are maintained in future years
- High Case – reflects the possibility of exports to Latin America increasing a great deal in coming years
- No Exports – depicts employment levels if there were no Southeastern exports to Latin America (a proxy for no trade)

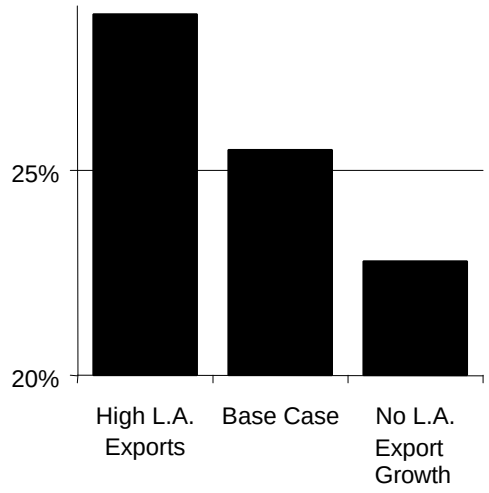
In the Base Case scenario, employment was predicted to increase by 10 million jobs between 2000 and 2020. That is, assuming current trade and economic growth continues, there will be 10 million additional jobs in the Southeastern Alliance states. In the High Case, employment will go up by 11.7 million jobs. Finally, if there was no growth in exports to Latin America from the Alliance, then employment growth would amount to just under 9 million (**Exhibit B4-6**).

Exhibit B4-6
CHANGE IN ALLIANCE EMPLOYMENT - FROM 2000 TO 2020
(Thousands of Jobs)



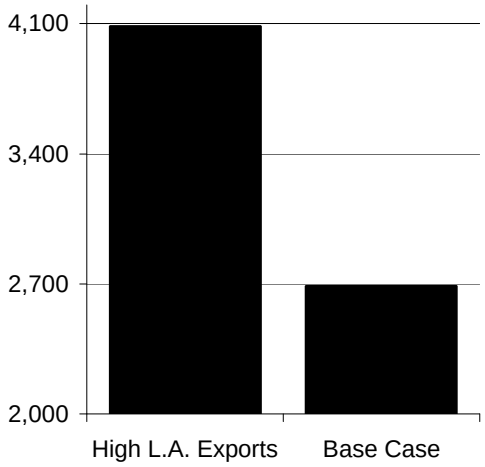
In each case, these changes represent significant growth percentages over the year 2000 prediction (**Exhibit B4-7**).

Exhibit B4-7
PERCENTAGE CHANGE IN EMPLOYMENT, 2020 VS. 2000



The High Case scenario represents notably stronger job creation, though, and the No Exports scenario would yield 2.7 million fewer jobs than the Base Case (**Exhibit B4-8**).

Exhibit B4-8
JOB GROWTH DIFFERENCE OVER "NO EXPORT" SCENARIO
(Thousands of New Jobs)



ECONOMIC DEVELOPMENT IMPLICATIONS

The focus of LATTS was the impact that Latin American trade growth will have on the transportation infrastructure of the Southeastern Alliance Region. As has been described in other components of this study, the increase in the volume of freight traffic associated with U.S./Latin American trade will directly affect the Region's ports, highways, railways and airports.

Trade with Latin America also has broader implications for the overall path of the Region's economic development. The purpose of this component of the study was to:

- provide estimates of the economic impact that Latin American trade might have on the Southeastern Alliance,
- consider the issue of balance of trade, and
- identify business opportunities that arise from the commodity flow forecast.

Economic Context

The importance of the role of trade in economic development has undergone a major transformation in Latin America and other parts of the developing world. In over three-quarters of the world's developing economies, substantial trade liberalization programs are now being implemented as a means of accelerating economic growth in explicit recognition of the failure of protectionist trade policies to deliver economic prosperity. Many of the remaining developing countries have also begun the process of discarding existing trade-impairing policies as part of an effort to liberalize their economies.

Even in developed economies with large domestic markets such as the Southeastern Alliance, the linkage between trade and rising living standards is becoming increasingly clear to broad segments of the population. The people of the Southeastern Alliance Region need to make important strategic choices to ensure sustainable development and increased opportunities for its citizens. A key success factor will be the ability to understand and capitalize on the Region's position in the global trade environment. These choices will necessarily be undertaken in a rapidly changing international arena characterized by:

- **A More Complex Global Marketplace**: Over the last decade demands for both more sophisticated consumer products and high-technology capital goods have risen while heavy industries have declined. The number of competitors in the global marketplace has increased, and intra-Asian trade is now larger in volume than Asian trade with America or Europe.

- **Emerging New Industrial Patterns**: Around the world, traditional vertically organized industry patterns are being replaced by network arrangements among firms. These new arrangements have increased the importance of industrial concentrations, local suppliers, and international distribution networks in determining industry and trade performance.

- **Shortening Product Lifecycles**: The nature of technological innovation and consumer demand has created an environment for new products whose lifecycles are relatively shorter than before. This has forced producers to remain competitive through heightened applications, innovation and quick responses to consumer demands.

- **Changing Requirements for Economic Infrastructure**: Where once basic human resource and physical infrastructure development was sufficient to compete as an industrial economy, new needs have emerged as a result of product advances made by industrial leaders. An increasingly wider array of occupational skills is now required to compete effectively. Attention to global technology developments is necessary to avoid being left behind by industry-destroying innovations. Similarly, information technology and logistics have become part of the basic framework for industrial development.

- **New Patterns of Geographic Division of Labor**: With agreements such as NAFTA, the Common Market, the Association of South East Asia (ASEAN), the Latin American Free Trade Agreement (LAFTA), countries around the world are increasingly reaching across-borders to develop competitive advantages by leveraging the differences in wage rates, technology development and industry capabilities.

- **A New Global Trading Regime**: An entirely new international order imposed by the demands of a new formalized regime governed by the World Trade Organization will influence how countries re-structure their governing methods, enact new legislation, and build relationships based on new trading requirements.

The Southeastern Alliance has a fast growing and dynamic economy that is highly suited to develop a strong position in this new global trading environment. A well-developed basic infrastructure is required which supports a strong set of advanced infrastructure elements such as a well-educated workforce, communications and access to advanced technology. The Region's geographic position and the history of its people make it well positioned to take the best advantage of the division of labor patterns that exist within the Americas. This position is based on the clear understanding that while Latin America offers elements of both market opportunity and competition, it is most helpful to think of it as a partner to work with to develop a mutually beneficial role within the emerging trading bloc of the Americas.

Economic Summary

Exhibit B4-9 presents the basic key performance indicators for the Southeastern Alliance, its member jurisdictions as well as the other regions of the United States. Relative performance of the Alliance versus the U.S. average is plotted in **Exhibit B4-10**. Real Gross State Product in the Southeastern Alliance Region will grow at 2.3% annually, and employment at 1.2%, both above the national average over the 1997-2020 forecast horizon.

The growth in Real Gross State Product in the Southeastern Alliance, at 2.3% annually, rivals the fastest growing (2.5%) Southwest region. Employment in the Southeastern Alliance will grow at 1.2% over the 1997-2020 forecast period, again lagging the Southwest and slightly below the Northwest. The Southeastern Alliance Region is very competitive in terms of business costs and other important elements of a positive business environment. As with many areas, a shortage of skilled labor in the Region is currently limiting its ability to develop the fast growing high-tech industries. However, this is a challenge that is actively being addressed by both business and political leaders in the Region.

Growth forecasts for the member jurisdictions will, for the most part, reflect past economic success, with Texas, Florida, Virginia, and North Carolina leading the way on the mainland. Puerto Rico, however, will achieve the fastest real GSP growth in the Region.

Economic Outlook

The Southeastern Alliance Region has experienced above average growth in recent years, outperforming its northern neighbors, but unable to keep up with the runaway pace of western regions. Texas and Florida led the Region in job growth in 1997, with 4.2% and 4.0% respectively. On the other side of the spectrum, Mississippi and West Virginia lagged behind with growth of 1.6% and 1.5% each, well behind the national average of 2.6%.

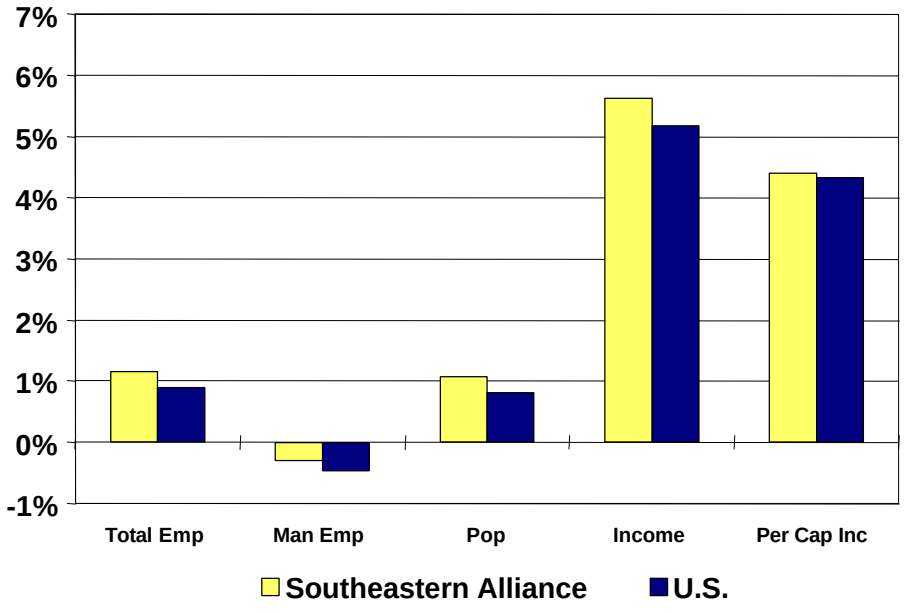
Over the forecast period 1997-2020, these trends will continue, with the Southeastern Alliance achieving above average annual growth in employment and real gross state product, but not as fast as the Northwest and Southwest region. Within the Southeastern Alliance, the growth patterns are consistent through employment, population, and real GSP. Eight of the Region's states will grow faster than the national average, while the other six will lag. Florida and Texas will lead the Region in GSP and employment growth. Florida's rapid population growth will contribute to achieving the highest employment growth rate over the forecast period, while Texas will retain the lead in real GSP growth. These growth trends are especially impressive considering that these states also have by far the largest bases of employment and GSP in the Region.

Exhibit B4-9
ECONOMIC PERFORMANCE INDICATORS

	Average Annual Growth, 1997-2020						
	Real GSP (Bil. 92$)	Population (Millions)	Employment (Thous.)	Manufacturing Emp. (Thous.)	Services Emp. (Thous.)	Personal Inc. (Bil. current $)	Per Capita Income (current $)
Alabama	1.62%	0.47%	0.51%	-0.62%	1.53%	4.90%	4.40%
Arkansas	2.12%	0.83%	0.90%	-0.05%	1.89%	5.45%	4.58%
Florida	2.63%	1.52%	1.73%	0.14%	2.50%	6.18%	4.59%
Georgia	2.17%	1.17%	1.19%	-0.41%	2.23%	5.67%	4.45%
Kentucky	1.77%	0.49%	0.54%	-0.60%	1.52%	4.88%	4.37%
Louisiana	1.66%	0.33%	0.47%	-0.13%	1.24%	4.76%	4.41%
Mississippi	1.64%	0.36%	0.42%	-0.61%	1.39%	4.96%	4.59%
North Carolina	2.31%	1.23%	1.21%	-0.52%	2.56%	5.68%	4.40%
Puerto Rico *	3.18%	0.44%	---	---	---	---	5.89%
South Carolina	2.16%	1.07%	1.08%	-0.63%	2.35%	5.75%	4.63%
Tennessee	1.88%	0.64%	0.72%	-0.45%	1.68%	5.22%	4.54%
Texas	2.65%	1.35%	1.41%	0.07%	2.35%	5.83%	4.42%
Virginia	2.06%	1.01%	1.08%	-0.25%	1.98%	5.42%	4.37%
West Virginia	1.43%	0.29%	0.39%	-0.24%	1.17%	4.97%	4.66%
Southeast Alliance	2.27%	1.08%	1.16%	-0.29%	2.16%	5.63%	4.50%
North Atlantic	1.48%	0.30%	0.44%	-0.89%	1.19%	4.65%	4.36%
Central	1.69%	0.41%	0.51%	-0.58%	1.41%	4.67%	4.33%
Northwest	2.24%	1.14%	1.20%	-0.28%	2.17%	5.42%	4.23%
Southwest	2.47%	1.35%	1.44%	-0.10%	2.33%	5.72%	4.31%
US Totals	1.99%	0.82%	0.90%	-0.47%	1.79%	5.18%	4.33%

**Although Puerto Rico is shown here for comparison, it is not included in the Southeastern Alliance or U.S. totals, since the data was incomplete.*

Exhibit B4-10
RELATIVE PERFORMANCE
(Annual Average Growth, 1997-2020)



Industrial Patterns

A favorable development has been the Region's increasing industrial diversity. Employment gains in the electronics and automotive industries are counterbalancing job losses in the textile, apparel, tobacco, and pharmaceutical industries.

The share of manufacturing employment in the Southeastern Alliance is on par with the national proportion. While employment in this sector will fall, as in the rest of the nation, the losses will not be as severe as in the North Atlantic or Central Regions. The service sector will be the most dynamic in employment growth over the next two decades, buoyed by rapidly growing high-technology industries. The development of the Research Triangle in North Carolina will spur service employment growth to the highest rate in the Southeastern Alliance, at 2.6% per year.

The oil price slump of the mid-1980s dealt a heavy blow to Louisiana and Texas. Nevertheless, strong oil prices in the mid-1990s allowed a revival in energy-related industries. Recent technological advances have lowered exploration and extraction costs, allowing oil producers to remain profitable.

Competitive Forces

The Southeastern Alliance's comparatively strong economic growth is sustained by a strong influx of people. Net migration to the South has been very high over the past five years, with Florida, Texas, Georgia, and North Carolina attracting the most residents. A slight moderation is expected over the next few years, before the retirement of baby boomers starts a new wave of in-migration in the next century. Rapid population gains have resulted in overcrowding of schools and congestion of the Region's transportation infrastructure. In many urban areas, water and air pollution are emerging as serious concerns.

Despite steady in-migrations, labor shortages (especially in high-skilled jobs) are constraining growth and putting upward pressure on wages. Low educational attainments are a limiting factor for many of the Southeastern Alliance states. It is of course encouraging that many business and political leaders understand that the emerging drivers of the economy, high-technology industries, require a highly-trained work force. Current concerns about labor and skill shortages are certainly pressing but they are also a function of success.

All of the Southeastern Alliance states have a per capita income growth rate above the national average. However, this mirrors the picture of low per capita income levels; all SE states are below the national average. Indeed, the Southeastern Alliance average per capita income in 1997 was the lowest among the regions. At the same time, low wages and business costs in the Southeastern Alliance are an attraction to companies. Many states also have incentive programs to attract key industries to locate within their borders.

CLUSTERS AND ECONOMIC DEVELOPMENT

The strength of a region's industry clusters and their ability to generate a strong and growing inflow of export earnings are a key determinant of success.

Clusters are groups of similar businesses that are important to a regional economy because, unlike single companies or plants, together they create more jobs and are better able to adapt to market changes over time. The "clustering effect" happens when many similar firms and their suppliers locate near each other in and around a region. This clustering results in the growth of a specialized set of capabilities—skills, technologies, business services—that is more than the sum of its parts. Successful regional economies are able to provide the businesses in its clusters with advantages in inputs that other competing regions are not able to provide.

Successful clusters are also well positioned in terms of the international distribution of labor. They are based on strong foundations within their own regions but also have strong and complementary linkages with suppliers and markets in other regions. The strength of these linkages effectively determines the level and nature of the region's trade with the rest of the world. In the context of Southeastern Alliance trade with Latin America these linkages are of particular importance.

The clusters of the Southeastern Alliance and the success they have in export markets will play a key role in making its economy more dynamic and adaptable. A strong economic infrastructure creates a more dynamic economy and attracts investment, which in turn leads to improvements in infrastructure and stronger clusters. Each element of this "virtuous cycle" supports the other elements (see **Exhibit B4-11**).

HEMISPHERIC INTEGRATION: A LOOK AT TRADE BALANCES

A key determinant of the Southeastern Alliance's ability to provide continued momentum to its current virtuous cycle of economic development will be its ability to develop a strong and constructive role in the ongoing economic integration of the Western Hemisphere's economy. A common means of evaluating the extent of integration and the benefits of trade is trade balance analysis. While it is important not to draw too many conclusions from such analysis, it is still a helpful way to illustrate the Southeast's role with respect to Latin American trade.

As can be seen in **Exhibit B4-12**, the Southeastern Alliance has a large negative oil and gas trade balance with Latin America. This negative balance is of course primarily a function of large oil and gas resource endowments in Latin America and geographic proximity to a large center of energy and feedstock demand in the Southeast. Similar reasons lie behind the negative trade balances in metallic ores, non-metallic ores, primary metal products, stone, clay and glass and petroleum and coal products. Latin America has large endowments of metallic ores which can be cost effectively transported to the

Exhibit B4-11
THE VIRTUOUS CYCLE OF ECONOMIC DEVELOPMENT

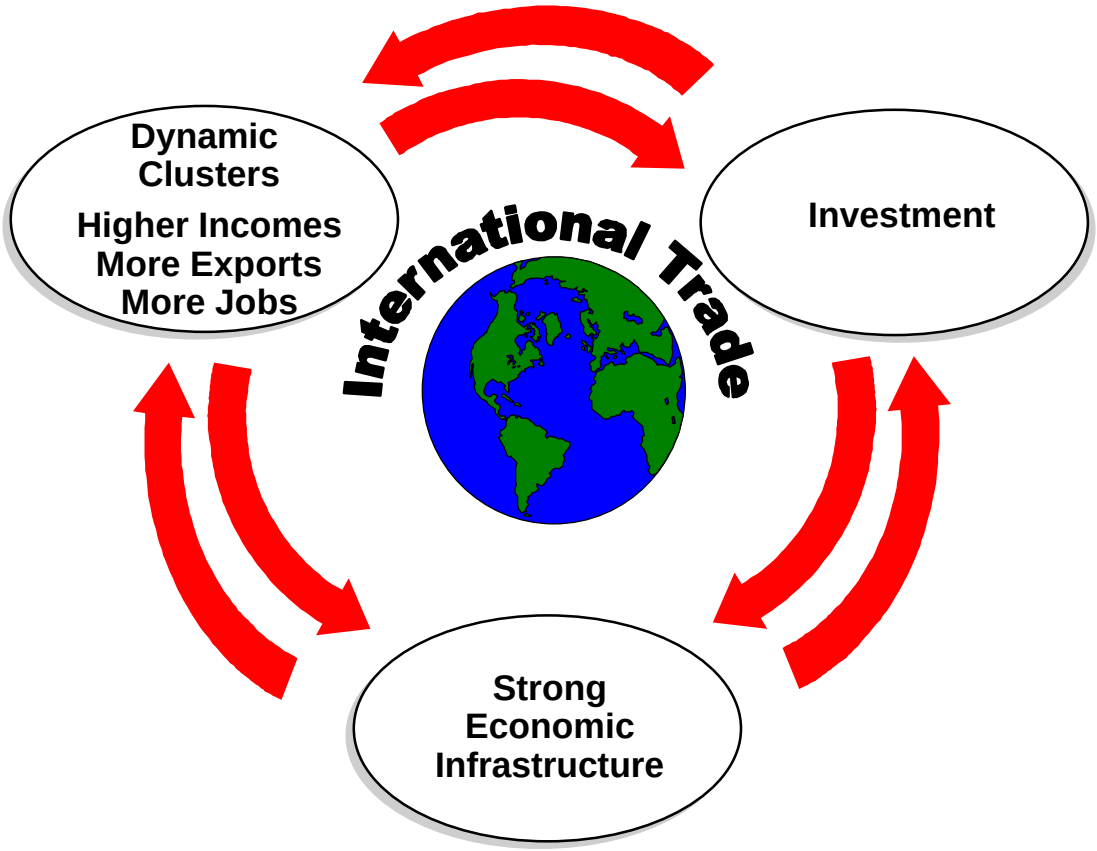


Exhibit B4-12
BALANCE OF TRADE BY COMMODITY: 1996

Commodity	Southeast Alliance Gateway Exports 1996 (MT)	Southeast Alliance Gateway Imports 1996 (MT)	Southeast Alliance Gateway Trade Balance 1996 (MT)
Total All Commodities	**99,009,351**	**241,093,596**	**-142,084,245**
Manufactured Commodities	21,153,234	15,242,930	5,910,304
Primary Commodities	41,714,215	34,894,324	6,819,891
Primary Manufactured Commodities	36,057,747	50,491,652	-14,433,905
Crude Oil and Natural Gas	84,152	140,464,700	-140,380,548
01-Farm Products	23,754,336	5,129,903	18,624,432
08-Forest Products	483,387	234,498	248,888
09-Fresh Fish & Other Marine Products	10,450	176,065	-165,616
10-Metallic Ores	488,186	16,165,245	-15,677,058
11-Coal	7,046,525	1,993,569	5,052,956
14-Nonmetallic Minerals, Exc Fuels	9,931,334	11,195,040	-1,263,707
19-Ordnance and Accessories	2,262	1,229	1,033
20-Food and Kindred Products	5,400,769	3,290,285	2,110,484
21-Tobacco Products	28,076	147,779	-119,703
22-Textile Mill Products	452,914	188,438	264,476
23-Apparel	437,758	544,885	-107,127
24-Lumber and Wood	1,625,164	2,019,248	-394,084
25-Furniture and Fixtures	177,208	273,873	-96,665
26-Pulp and Paper	2,857,580	434,653	2,422,927
27-Printed Matter	333,961	190,406	143,555
28-Chemicals	14,651,670	7,204,978	7,446,691
29-Petroleum and Coal Products	14,285,030	26,728,666	-12,443,637
30-Rubber & Plastics	848,287	276,665	571,623
31-Leather	42,486	80,994	-38,508
32-Stone, Clay, Glass & Concrete	5,593,638	10,370,195	-4,776,558
33-Primary Metal Products	1,527,421	6,187,812	-4,660,391
34-Fabricated Metal Products	1,361,092	989,493	371,599
35-Machinery, exc Electrical	1,385,372	590,768	794,604
36-Electrical Machinery	1,076,982	910,036	166,947
37-Transportation Equipment	1,245,102	2,505,575	-1,260,473
38-Instruments	111,885	72,992	38,893
39-Misc Manufacturing	109,732	62,478	47,254
40-Waste and Scrap	2,336,735	1,690,089	646,646
41-Misc Freight	29,868	3,580	26,288
46-Misc Mixed Shipments	33	12	21
Unknown	1,289,959	969,449	320,510

Southeast for processing into more value-added products. The oil and gas stocks in Latin America give some advantage to the production of oil and gas products from this resource for use in the Southeast.

The key point is that these large negative balances are not in any sense “bad” for the Southeast. They merely indicate the logical outcome of specific natural resource endowments. Similarly, the large positive coal balance for the Southeast is simply a factor of strong resource endowments that are located near efficient Southeast Atlantic ports. In addition, the Region’s forestry industry has become a world leader in the production of softwood fiber that gives it strong advantages in the Latin American market.

The Southeastern Alliance’s agrifood cluster (farm and food products) has a strong positive trade balance with Latin America. This is certainly partly a

function of resource endowments that permit efficient production of wheat, corn and other grains that are in demand in Latin America. However, of increasing importance, is the Southeast's capability of producing high-value added food products that will become increasingly in demand as Latin American per capita income levels rise. In many cases these southbound food products will require special transportation infrastructure to ensure their delivery to consumers in a way that maintains their value-added market position.

The leadership position of the Region's chemical cluster is also demonstrated by the trade balances. The Region's ability to produce basic and more value-added chemicals at low costs makes the Latin American market a promising market.

Some of the positive and negative industry trade balances should be considered in pairs. For example, the positive Textile Mill Products balance is a logical complement to the negative Apparel balance. High value-added textiles and clothing components are produced in the Southeast. These are shipped to Latin America for lower labor cost assembly into apparel, some of which is then shipped back to the Southeast. These pairs of commodity flows are indicative of the success that the Southeast will have in many industries – providing the higher value-added manufactured inputs as well as key design, marketing and R&D inputs to a wider chain of production that includes final assembly in Latin America. This final assembly often takes place in Latin America due to wage cost differentials, but it can also occur there due to reasons of market proximity. Especially in large markets such as Brazil, local assembly will make sense as a means of ensuring the ability to quickly and flexibly respond to changing local market conditions.

Over the next 25 years, the negative trade balance is set to shrink. As can be seen in, **Exhibit B4-13** the overall trade deficit will fall from 42% of total trade (in metric ton terms) to 28% of total trade. Important contributors to this improvement in the overall trade balance include: Nonmetallic Minerals, Waste and Scrap, Petroleum and Coal Products, Transportation Equipment, Misc Manufacturing, Chemicals, Stone, Clay, Glass and Concrete, Electrical Machinery and Food and Kindred Products.

The trade balance will not uniformly improve over the next 25 years. The general trend is for Latin America to experience increased success in a number of industries in which lower labor costs or favorable natural resource endowments play an important role. The following are the most important commodities that will see a deterioration in the Alliance gateway trade balance with Latin America: Apparel, Instruments, Furniture and Fixtures, Printed Matter, Coal, Lumber and Wood, Rubber & Plastics, Fabricated Metal Products, Pulp and Paper, and Farm Products.

Exhibit B4-13
BALANCE OF TRADE BY COMMODITY: 1996 AND 2020

Commodity	Southeast Alliance Gateway Trade Balance 1996 (MT)	Balance as % of total trade (%)	Southeast Alliance Gateway Trade Balance 2020 (MT)	Balance as % of total trade (%)
Total All Commodities	**-142,084,245**	**-42%**	**-295,870,472**	**-28%**
Manufactured Commodities	5,910,304	16%	35,419,054	16%
Primary Commodities	6,819,891	9%	40,949,308	17%
Primary Manufactured Commodities	-14,433,905	-17%	22,509,125	10%
Crude Oil and Natural Gas	-140,380,548	-100%	-394,747,945	-100%
01-Farm Products	18,624,432	64%	41,780,790	48%
08-Forest Products	248,888	35%	2,991,043	59%
09-Fresh Fish & Other Marine Products	-165,616	-89%	-539,538	-85%
10-Metallic Ores	-15,677,058	-94%	-47,107,244	-88%
11-Coal	5,052,956	56%	6,239,114	22%
14-Nonmetallic Minerals, Exc Fuels	-1,263,707	-6%	37,585,132	59%
19-Ordnance and Accessories	1,033	30%	-461	-6%
20-Food and Kindred Products	2,110,484	24%	10,863,417	40%
21-Tobacco Products	-119,703	-68%	-54,348	-12%
22-Textile Mill Products	264,476	41%	1,419,983	41%
23-Apparel	-107,127	-11%	-3,619,075	-53%
24-Lumber and Wood	-394,084	-11%	-12,109,190	-43%
25-Furniture and Fixtures	-96,665	-21%	-1,531,451	-57%
26-Pulp and Paper	2,422,927	74%	9,165,242	52%
27-Printed Matter	143,555	27%	-171,433	-8%
28-Chemicals	7,446,691	34%	42,661,521	56%
29-Petroleum and Coal Products	-12,443,637	-30%	7,063,501	11%
30-Rubber & Plastics	571,623	51%	2,271,465	21%
31-Leather	-38,508	-31%	-254,751	-43%
32-Stone, Clay, Glass & Concrete	-4,776,558	-30%	-4,282,370	-10%
33-Primary Metal Products	-4,660,391	-60%	-22,933,511	-59%
34-Fabricated Metal Products	371,599	16%	-1,673,671	-9%
35-Machinery, exc Electrical	794,604	40%	7,232,109	47%
36-Electrical Machinery	166,947	8%	4,203,859	26%
37-Transportation Equipment	-1,260,473	-34%	372,784	1%
38-Instruments	38,893	21%	-218,286	-17%
39-Misc Manufacturing	47,254	27%	352,047	53%
40-Waste and Scrap	646,646	16%	15,129,485	73%
41-Misc Freight	26,288	79%	107,763	86%
46-Misc Mixed Shipments	21	47%	26	100%
Unknown	320,510	14%	3,933,546	66%

ECONOMIC IMPACT

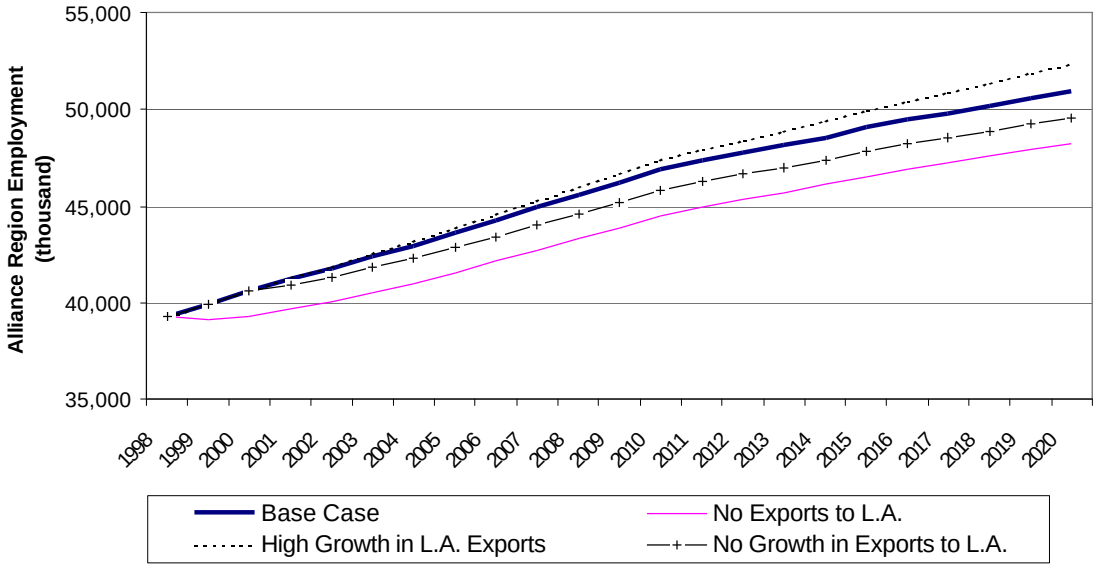
Trade with Latin America generates jobs for the people of the Southeastern Alliance. Furthermore, the Region's position in the hemispheric economy means that jobs created will be in the more value-added industries and in the higher wage occupations employed within those industries. While this should be clear from simple analysis of the trade figures, a quantitative analysis was undertaken to provide a clear estimate of the benefits generated by exports to Latin America. For this analysis, a system of U.S. state and regional macroeconomic models was used to undertake two simulations which explore the impact of Latin American trade on the Alliance Region.

The key findings were that nearly 1.3 million of the Alliance Region's jobs are currently supported by exports to Latin America. Strong growth in exports to

Latin America over the 25 year analysis period will generate an additional 1.4 million jobs. In terms of economic output, growth in exports to Latin America will generate an additional $105 billion (1992 $) of Real Gross Regional Product – roughly equal to the current output of Louisiana.

Exhibit B4-14 illustrates some of these impacts on non-farm employment in the Region. The "Base-Case" scenario is for the level of employment in the Region over the 25 year analysis period which incorporates the export growth forecast in this study. The "No-Growth" level of employment shows the impact of a complete absence of Latin American export growth. The more extreme "No-Export" situation shows the impact of Latin American exports falling to zero. The "High-Growth" scenario shows how a higher growth forecast of exports to Latin America would affect employment in the Region.

Exhibit B4-14
ALLIANCE REGION NON-FARM EMPLOYMENT



No Latin American Exports Scenario

The first simulation was based on the question: What if exports to Latin America did not exist? This involved assumptions that allowed for the removal of current and forecast Latin American trade from the Southeastern Alliance's economy. The results from this analysis were then used to determine the number of jobs that are and will be supported by Latin American exports.

As can be seen in **Exhibit B4-15**, by 2020 there will be 2.7 million jobs dependent on exports to Latin America. Without these exports, employment would be lower by 5.3%, real Gross Regional Product would be 5.3% lower and state and local taxes would be 5.7% lower. Looking over the shorter-term, the results show that in the year 2000, Latin American trade will be supporting 1.29 million jobs in the Region and generating $5.2 billion (1992 $) in state and local taxes.

Exhibit B4-15
IMPACT OF LATIN AMERICA TRADE ON THE SOUTHEASTERN ALLIANCE
What if there were no exports to Latin America?

	2000	2005	2010	2015	2020
Total Nonfarm Employment (thousands of jobs)					
Base Case	40,583.77	43,604.58	46,869.14	49,049.88	50,932.59
"No L.A. exports" Alternative	39,290.45	41,555.09	44,509.87	46,542.07	48,244.15
Difference	-1,293.32	-2,049.49	-2,359.27	-2,507.82	-2,688.44
%Difference	-3.2	-4.7	-5.0	-5.1	-5.3
Real Personal Income ($billions)					
Base Case	1,937.22	2,225.40	2,581.84	2,946.39	3,353.67
"No L.A. exports" Alternative	1,881.51	2,108.87	2,434.16	2,777.82	3,159.20
Difference	-55.70	-116.53	-147.68	-168.57	-194.48
%Difference	-2.9	-5.2	-5.7	-5.7	-5.8
Real Gross Regional Product ($billions)					
Base Case	2,251.20	2,572.36	2,914.61	3,173.81	3,393.71
"No L.A. exports" Alternative	2,175.10	2,448.42	2,764.75	3,009.04	3,212.66
Difference	-76.10	-123.94	-149.86	-164.76	-181.05
%Difference	-3.4	-4.8	-5.1	-5.2	-5.3
State and Local Taxes ($billions)					
Base Case	182.67	209.12	236.77	264.08	291.89
"No L.A. exports" Alternative	177.44	198.25	223.35	249.14	275.17
Difference	-5.23	-10.87	-13.41	-14.94	-16.72
%Difference	-2.9	-5.2	-5.7	-5.7	-5.7

The impact of exports to Latin America is distributed unevenly across the Region. As is shown in **Exhibit B4-16**, states such as Texas, Louisiana and Kentucky would see the greatest percentage decrease in their economic output if there were no exports to Latin America. Economic output in states such as Virginia, North Carolina, Georgia and Arkansas are relatively less dependent on exports to Latin America.

High Latin American Exports Scenario

The second simulation was based on the question: What if the High Trade scenario came to pass? This simulation involved increasing exports to Latin America by the amount identified in the "High Trade forecast scenario." The results were expressed in terms of incremental jobs, output, income, and taxes attributed to this additional growth.

As can be seen **in Exhibit B4-17**, by 2020 the High Trade scenario would have generated 1.4 million new jobs and 8.4 billion (1992 $) in state and local government taxes – an increase of 2.7% and 2.9% respectively over the Base Case. Much of the economic pay-off of the High Trade scenario will happen over the longer term, but this profile is roughly in-line with the growth profile of the trade scenario itself.

Exhibit B4-16
EXPORTS TO LATIN AMERICA: IMPACT ON REAL GROSS REGIONAL PRODUCT IN 2020

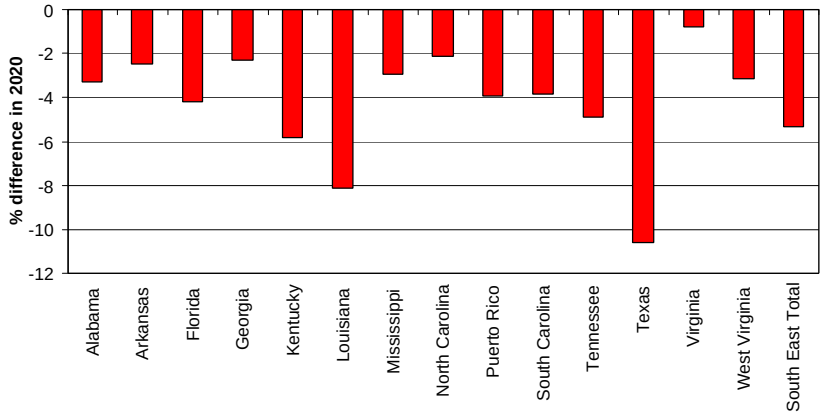


Exhibit B4-17
IMPACT OF HIGH TRADE SCENARIO ON THE SOUTHEAST ALLIANCE REGION
What if the High Trade scenario came to pass?

	2000	2005	2010	2015	2020
Total Nonfarm Employment (thousands of jobs)					
Base Case	40,583.77	43,604.58	46,869.14	49,049.88	50,932.59
"High L.A. exports" Alternative	40,630.26	43,845.51	47,377.72	49,936.46	52,333.12
Difference	46.49	240.93	508.57	886.58	1,400.53
%Difference	0.1	0.6	1.1	1.8	2.7
Real Personal Income ($billions)					
Base Case	1,937.22	2,225.40	2,581.84	2,946.39	3,353.67
"High L.A. exports" Alternative	1,939.00	2,237.38	2,611.16	3,002.96	3,451.69
Difference	1.79	11.98	29.32	56.57	98.02
%Difference	0.1	0.5	1.1	1.9	2.9
Real Gross Regional Product ($billions)					
Base Case	2,251.20	2,572.36	2,914.61	3,173.81	3,393.71
"High L.A. exports" Alternative	2,253.89	2,586.81	2,946.21	3,230.91	3,486.16
Difference	2.69	14.45	31.60	57.10	92.46
%Difference	0.1	0.6	1.1	1.8	2.7
State and Local Taxes ($billions)					
Base Case	182.67	209.12	236.77	264.08	291.89
"High L.A. exports" Alternative	182.84	210.24	239.44	269.10	300.31
Difference	0.17	1.12	2.67	5.02	8.43
%Difference	0.1	0.5	1.1	1.9	2.9

SECTION B5
INTERNATIONAL TRADE AGREEMENTS AND BARRIERS

As noted in Section B2, the LATTS High Case forecast of international trade was based, in part; upon a scenario that assumes fully liberalized trade and investment flows in the Western Hemisphere. This report section provides a context for the scenario by:

- Examining the history of trade agreements and how they are evolving from being purely preferential toward being less restrictive;
- Discussing the different trade barriers which are used by countries to protect specific domestic sectors; and
- Identifying specific trade barriers across Latin American countries overall, and for specific commodity groups.

TRADE BARRIERS

A number of trade barriers have been employed in order to protect industries, to raise revenue, and to counter the barriers erected by other foreign countries. These barriers create a distortion of relative prices across countries and, consequently, distort individual consumption patterns and lower individual welfare. A general discussion of these barriers and their consequences is provided below.

Tariffs

Tariffs have been a means of protecting domestic industries and creating revenue for centuries. A tariff is really nothing more than a tax placed on goods imported into a country. In the early years of the U.S., tariffs were the main source of revenue for the Federal government and continued to be an important source of revenue up until the 1930's. Today, the average tariff rates across goods and across countries are between 10 and 15 percent and are not a significant source of revenue for most countries (Rajapatirana, 1994b). However, tariffs still present a significant barrier to trade among nations.

By placing a tax on imported goods, a tariff raises the price of goods and allows certain domestic producers to produce at higher levels. In doing so, resources may be diverted away from industries for which a country has a competitive advantage to industries for which the country does not have a competitive advantage. Diversion of resources creates higher prices and lower quality for goods that are produced domestically. Therefore, a tradeoff exists between saving jobs in specific industries versus the welfare of consumers.

Quotas

A quota, also referred to as a quantitative restriction, is a policy tool to restrict trade by placing a ceiling on the amount of a product that can be imported during a given period. As a result, the restriction will create artificially high prices on goods and reduce the amount of competition within that industry. A variation of the quota system is a voluntary export restrictions (VER). Under VER, an exporting country is asked to restrict their exports under the threat of explicit restrictions and trade barriers.

In general, the goods that have quotas placed against them are goods that the country does not have a competitive advantage in and yet they produce them. Because the country does not have a competitive advantage in the goods, the cost of producing the goods will be higher than the cost of other countries, and therefore, the selling price will be higher than the world price of the goods. In the end, consumers are the ones who suffer the consequences by paying higher prices for the goods that have restrictions placed on it.

Duties

A duty is a tax imposed on imported goods by the customs authority. It is often applied as an ad valorem tax and is either based upon the value of the good or the weight or quantity of the good. A duty has a similar effect as a tariff in that it raises the price of imports and distorts the relative price of goods and consumption patterns. Therefore, duties create a consumer welfare loss.

Exchange Rate Controls

Many third world countries try to be protective of their unstable and struggling economies. Therefore, they want to be self-reliant as much as possible to encourage their domestic industries. In an attempt to protect their domestic industries, third world countries will often create exchange rate barriers to reduce the influx of foreign currency, which reduces the ability of a country to purchase imports. Consequently, residents will be forced to purchase goods from domestic producers which creates an artificially diversified domestic economy that produces a number of goods for which the country does not have a competitive advantage. As a result, consumers will have to pay a higher price on goods and services and resources will be diverted away from industries for which they have a competitive advantage (Gwartney and Stroup, 1995).

Dumping Policy

Dumping occurs when a producer sells a product in a foreign market at prices below that of their own domestic market. Dumping could be just a strategy of a producer (predatory dumping practices), or it could be the result of foreign government subsidies. This will not only enable a domestic producer to crack the foreign market, it may, eventually, drive out competition in that foreign market.

Subsidies

Subsidies come in the form of grants, concessionary loans, loan guarantees, and tax credits that are provided by a government to provide financial benefits on the production, manufacturing, and distribution of goods or services to foreign markets. Once again, these subsidies distort the relative price of goods and distort individual consumption patterns. Furthermore, it is an anti-competitive practice that restricts the ability of foreign producers to compete in a worldwide market. Subsidies have been widely used in the agriculture industry.

Fair Trade Practices

Policies that are recognized as countervailing polices of trade can become protectionary policies as well. Trade policies such as anti-dumping, safeguards, and countervailing duties can be used to restrict trade and actually hurt free trade when these techniques are abused. When one country tries to retaliate against another country by using these policies, they can also create an escalating trading war that hurts consumers and producers of each country.

Price Bands

Many countries use what is referred to as "price bands" to restrict the importation of agriculture products. Price band is a policy instituted by the government that calculates the price range of a product from a time series analysis of international prices for that product. For example, a government may examine the prices of a product for a 60 month time period. Out of these prices, a portion of the highest and lowest prices will be eliminated. The remaining highs and lows establishes the price band. Imports entering within the price rage are assessed a standard tariff rate. Imports entering above that price range are assessed a lower tariff rate, while imports entering below that market rate are assessed a very high tariff rate. Therefore, if a particular country has low prices for a good because of excessive supply, their goods will have a higher tariff rate assessed to the product.

Other Barriers

While there has been a decline in tariff rates across countries, a number of other barriers have often taken the place of the tariff. These barriers include licensing requirements[1], government procurement practices[2], technical standards[3], and domestic-content rules[4]. In addition, a government can also

[1] Often, a country can require a license, which is a property right to export to a country. The country will only issue so many licenses and they are then bought and sold among producers who want to export to the country.

[2] For government contracts, domestic producers are often given preferential treatment.

[3] This could include pollution standards, safety standards, measurement standards, and health standards.

make the custom system complex and burdensome to hinder imports. Like any other barrier, these requirements reduce the level of competition within a market and artificially create higher prices that reduces the welfare of the consumers.

MOTIVATION FOR THE FREE TRADE MOVEMENT

This review does not argue either for or against free trade. Instead, the review attempts to identify whether the "free trade wheel" is indeed in motion, driven fundamentally by decades of trade negotiations and agreements which as a whole tend towards being freer and more open.

Supporters of freer trade argue that it allows individuals the liberty to buy and sell goods and services from a worldwide market, and that (most) all countries will improve their quality of life when participating in trade that is without restrictions. Free trade allows people to make consumption decisions that maximize their welfare: restricted trade does not allow that freedom. In other words, when there is free trade, individuals are free to choose the least cost alternative, and hence, improve individual welfare.

Free trade also enhances production efficiency by allowing countries, or sectors within, to specialize in the production of goods in which they have a comparative advantage. A comparative advantage results from different countries having different endowments in factors of production. For example, if a country has abundant supply of coal, while another country has a highly technical labor force, each country should specialize in the production of goods which matches their resource pool. So in this case, the first country ideally should specialize in the production of coal and energy, while the second country should specialize in goods that require a technical labor force.

By specializing in goods in which the country has a particularly competitive advantage, those goods can be produced at a lower cost than when the goods are produced by all countries. In doing so, all participants in trade can enjoy goods at a lower cost, higher quality, and increased quantity than if they were produced by all countries.

This is in line with the tendency for industries to increasingly rely on globally integrated supply chains, whereby the production and distribution of goods is done through a chain of suppliers located across several international borders. To remain competitive, parts and components are produced by suppliers which specialize in certain production factors. Moreover, these specialists tend to be located where their process receives the greatest comparative advantage. For example, labor-intensive processes (like simple assembly, or sewing) gravitate to areas where labor is relatively cost effective. On the other hand, capital-intensive processes tend to gravitate to areas where labor costs are relatively higher.

[4] A domestic content rule requires a certain portion of a product to be made domestically. This tactic is often used by the automobile industry within the U.S..

Naturally free trade also leads to industrial shifts whereby low wage jobs move to lower cost locations. Not everyone is convinced yet that all laid off employees can effectively improve their skills and move into sectors (processes) which have a comparative domestic advantage. However, a landmark study in 1984[5] showed that the cost of saving jobs by restricting trade (higher cost of goods) was greater than the income generated by the saved jobs. The study found that tariffs saved over 116,000 jobs in the apparel industry. However, the cost of saving each job was over $45,000 while the average earning of the jobs was just under $7,000.[6] Therefore, for every dollar saved in earnings, there was $6.80 lost in an increase the cost of goods. Other examples are provided in **Exhibit B5-1**. In **Exhibit B5-2**, the increase in prices of different goods is highlighted.

Exhibit B5-1
COST OF PROTECTING JOBS

Product	Number of Jobs Protected	Average Earnings	Cost Per Job	Ratio of Cost to Earnings
Citizen's band transceivers	587	$8,500	$85,539	10.1
Apparel	116,188	6,669	45,549	6.8
Footwear	21,000	8,340	77,714	9.3
Carbon Steel	20,000	24,329	85,272	3.5
Autos	58,000	23,566	85,400	3.6

In 1980 dollars

Exhibit B5-2
IMPACT OF TRADE BARRIERS ON PRICES

Item	1985 Free Market Price	1985 Price with Trade Restraints
Blue Jeans	$14.50	$18.00
Rubber Boots	10.00	12.00
Vinyl Purse	10.00	12.00
Leather Purse	40.00	44.00
Box of Candy	2.00	5.00
Automobile	7,500.00	10,000.00

Source: Gary Clyde Hufbauer, Diane T. Berliner, and Kimberly Ann Elliot, Trade Protection in the United States: 31 Case Studies (Washington, DC: Institute for International Economics, 1986); Clyde Farnsworth, "Trying to Shield Injured American Industries," *New York Times*, January 18, 1987.

[5] Source: Keith E. Maskus, "Rising Protectionism and U.S. International Trade Policy," Federal Reserve Bank of Kansas City, Economic Review (July/August 1984), pp. 3-17.
[6] In 1980 dollars.

IMPACT OF TRADE AGREEMENTS ON GLOBAL TRADE

Trade agreements have created an ever-shrinking world that has progressively been moving towards a global market. On a daily basis, U.S. consumers buy goods that are produced in places like China, Germany, and Brazil, while U.S. companies produce goods that are consumed by people in places like Australia, Mexico, and Russia. This increase in trade can be attributed to a number of factors including the reduction in the cost of communication and transportation, as well as other socioeconomic factors which have lead to higher worldwide disposable income. Another key factor is an almost century long series of continuously evolving international negotiations that have led to numerous agreements to reduce barriers to trade.

These trade agreements include both global and regional agreements. Examples of global agreements include the General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO). Examples of regional agreements include the Latin American Free Trade Agreement (LAFTA), the Andean Pact, the Central American Common Market (CACM), the European Economic Community (EC), the Association of South East Asia (ASEAN), and the North American Free Trade Agreement (NAFTA). These agreements have reduced trade barriers among member nations and directly led to an increase in volume of trade as displayed **in Exhibit B5-3**. Ultimately, the global economy is progressing towards conditions involving free movement of goods across-borders with less restrictions to what people can buy.

Exhibit B5-3
IMPACT OF GLOBAL TRADE NEGOTIATIONS ON TRADE
(Constant dollars)

Time Frame	Number of GATT Countries	Value of Trade Covered	Average Tariff*
Mid 1940's	23	$10 Billion	100%**
Mid 1980's	124	$755 Billion	5 %

Source: Compiled from "Evolution of Trade Treaties and Trade Creation: Lessons for Latin America."
** Average tariff for industrialized nations.*
*** Before GATT (1947).*

PRINCIPLES AND EVOLUTION OF TRADE AGREEMENTS

Over time, countries have realized the importance of trade and have pursued international agreements that have reduced the barriers to trade.[7] The pursuit of freer trade is often referred to as trade liberalization. Trade liberalization is

[7] For additional evidence on how trade barriers can affect economic growth, refer to Barro (1991), Gould, Ruffin, and Woodbridge (1993), Michaely, Papageogiou, and Choski (1991), and Gwartney, Block, and Lawson (1992).

the act of reducing trade barriers by reducing tariff rates, reducing quantitative restrictions, reducing the variance in protection across industries, and increasing the transparency of trade policy. These agreements have generally fallen into one of two categories (Rajapatirana, 1994b):

1. Equal Treatment
2. Preferential Treatment

The classification is based upon a principle referred to as the most favored nation (MFN) principle whereby any access to a domestic market given to one trading partner has to be extended to all countries. Under equal treatment, all countries are given access, while under preferential treatment, only certain countries are given access to a domestic market, while other countries are not. The principle is also applied in terms of the number of sectors involved. At the preferential extreme, a single sector or commodity is protected through agreement, while at the other extreme all goods are traded freely.

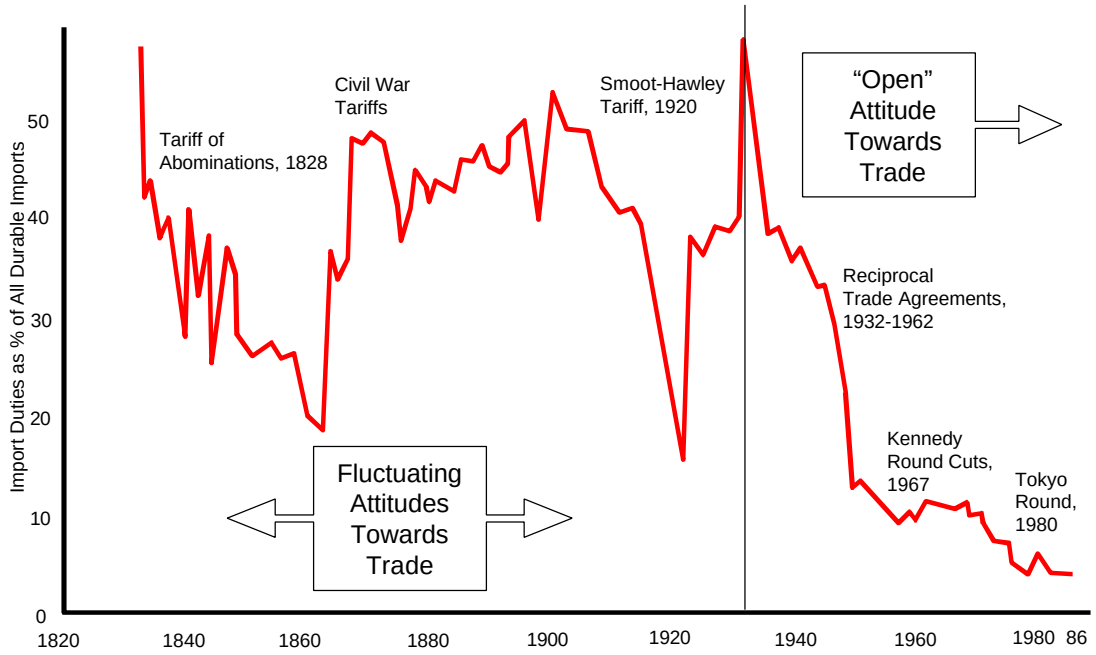
History of Agreements

In the mid 1800's, a number of regional agreements that provided preferential treatment for specific countries were made among European countries to reduced trade barriers. These agreements began the movement towards freer trade. Meanwhile, the U.S. had an inconsistent stance on free trade as a number of trade barriers were reduced and then reinstated. By the 1920's, the U.S. had a tariff rate as low as 20 percent, but in 1930, the U.S. had a radical shift in policy by instituting the Smoot Hawley tariff that significantly increased U.S. tariffs. Within a few short years, the U.S. recognized the harmful effects of this tariff and started to make international regional agreements (referred to as Reciprocal Trade Agreements) that provided preferential treatment to selected countries. In the course of the next 60 years, the U.S. entered a number of agreements that provided both preferential and equal treatment to world trading partners. Each of these trade agreements has made a significant contribution towards free trade through the reduction of trade barriers including tariff rates. **Exhibit B5-4** displays how tariffs have been reduced within the U.S. through the negotiation of numerous agreements. Many of these agreements are highlighted in the following pages.

General Agreement on Tariffs and Trade

An agreement that exemplifies equal treatment and the MFN principle is the General Agreement on Tariffs and Trade (GATT). A country that gains membership into GATT automatically gains access to the rest of the members of the world trading system on a MFN principle. The agreement creates an incentive for member countries to specialize in industries for which they have a competitive advantage, rather than specializing in industries they already have. In the end, and although not perfect, GATT has led to greater competition and reduced cost of production for industries across countries.

Exhibit B5-4
AVERAGE U.S. IMPORT DUTIES, 1820-1986



GATT was developed in the late 1940's and has evolved over the years with intense negotiations among member countries. Through GATT a number of changes in the world trading system occurred. At the forefront is the use of tariffs. At the outset of GATT, the average tariff rate was over 100 percent among industrialized countries (Edwards, 1994). By 1993, this rate had fallen to less than 5 percent among industrialized nations. This remarkable decrease has changed consumption patterns and the welfare of people across the world. Trade among countries have increased dramatically over the last several decades creating new business opportunities for companies and enhancing the standard of living across the world.

Regional Trade Agreements in the Western Hemisphere

During the same time that GATT was evolving, Regional Trade Agreements (RTAs) were forming. In general, the initiated RTAs did not adhere to the MFN principle and provided preferential treatment to an exclusive number of countries. These agreements were often formed among countries in close geographical proximity to one another. These RTAs were accepted under GATT through clauses with the rationale that RTAs were taking steps toward freer trade, even if it was not consistent with GATT and the MFN principle.

In the 60's, a number of RTAs were formed within the Western Hemisphere including the Central American Common Market (CACM), Latin American Free Trade Agreement (LAFTA), and the Andean Treaty (Rajapatirana, 1994b).

These agreements were pursued by Latin American countries with a hope of creating a larger economic region in which economies of scale could be obtained by producers. In many cases, these agreements included a complex system of regulations and were often done on a product-by-product basis. Consequently, these trade agreements ended up actually reducing the trade among the regional partners and isolating these countries from the international economy (Rajapatirana, 1994b).

By the 1980's, many of these original negotiated agreements were either abandoned or modified, while other RTAs were forming. This new generation of RTAs had a greater emphasis on trade liberalization. In other words, these RTAs were not developed to protect specific industries but rather to open new markets for industries. This trade liberalization was accompanied by monetary and fiscal reforms including a devaluation of exchange rates, reduction of fiscal deficits, deregulation and privatization of many public enterprises.

The agreements of the 80's included a modified CACM agreement, a modified Andean Treaty called the Andean Pact, the Mercosur agreement, the Caribbean Basin Act, G3 agreement, the Canada U.S. agreement (CUSFTA), and the North America Free Trade Association (NAFTA) (Rajapatirana, 1994b). Each of these agreements have had varying levels of success and have changed the way industries locate, import, and export. However, the agreements are not really free trade agreements, rather they are freer trade agreements. A Western Hemisphere trade agreement, such as the current Free Trade Area of The Americas (FTAA) initiative, would be a significant step towards free trade in the Americas.

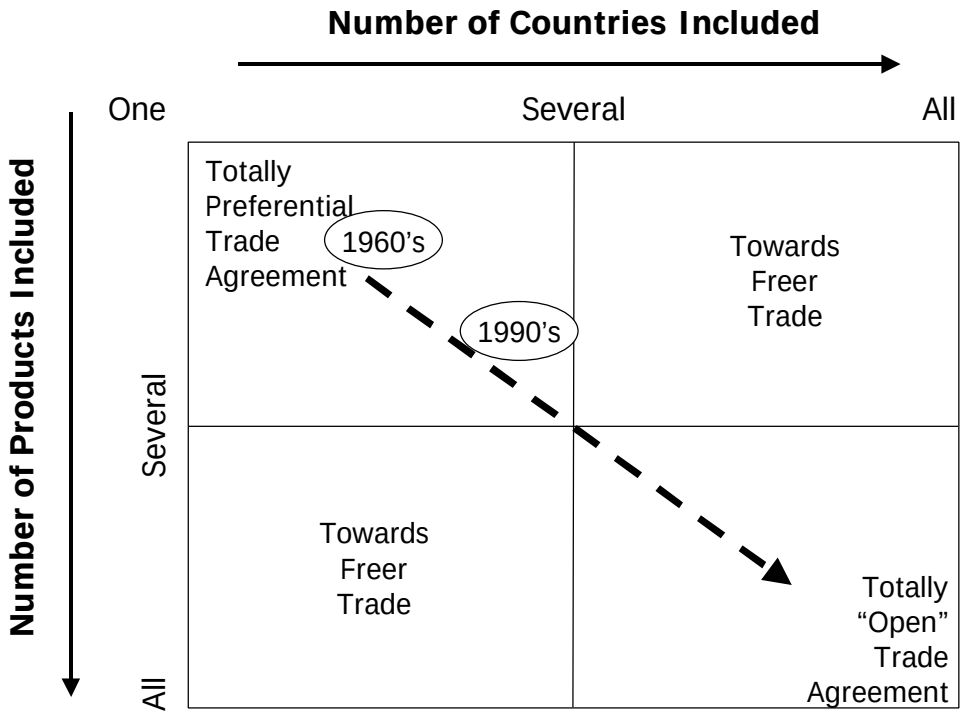
These agreements were more consistent with the MFN principle with greater access to the world market **Exhibit B5-5** illustrates the nature of trade agreements and the movement towards freer trade. The exhibit suggests that the market is moving towards greater and equal access for all countries. The evolution of these agreements are highlighted in the following discussion in which many of these agreements are described in more detail.

THE EVOLVING NATURE OF LATIN AMERICAN REGIONAL TRADE AGREEMENTS

Andean Community

The Andean Community was formed in 1969 and was formerly knows as the Andean Pact or Andean Group. The agreement is among the member countries of Bolivia, Columbia, Ecuador, Peru, and Venezuela that creates an economic region of over 75 million people and a combined GDP of $149 billion. During the late 80's and 90's, the Andean Community experienced tremendous success as intra-Andean trade increased by about 29 percent per year for the years 1990 through 1995 while maintaining a strong growth in exports to non-Andean countries. However, the growth that the group experienced in the mid 1990's has recently slowed down and the future success of the trade agreement may depend upon the developments of FTAA (INT, 1996).

Exhibit B5-5



Caribbean Community (Caricom)

Established in 1973 as successor to the Caribbean Free Trade Association, Caricom includes the countries of Antigua, Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Monsterrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad & Tobago. The economic region comprising these countries includes over 6 million people with a combined GDP of $28.6 billion with an average per capita income of over $4,930. Trade among the member countries has been growing at a rate of about 8 percent per year, while exports to the rest of the world has been growing at slower 5.5 percent. However, trade still only represents a rather small 13 percent of the total GDP among the member countries and indicates that there is room for further integration (INT, 1996).

Central American Common Market (CACM)

CACM was established in 1961 among the member countries of Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. CACM has a total population of over 29 million people with a combined GDP of $93 billion with an average per capita income of $2,984. Intra-regional trade among the member countries accounts for 20 percent of total CACM exports with both exports and imports growing at a rather steady and strong pace (INT, 1996). The CACM also established common external tariff rates of 5-20 percent and has helped

promote trade with the U.S. During the early 90's, exports from the U.S. grew at an average annual rate of 60 percent (INT, 1996).

Common Market of the South (Mercosur)

Mercosur was established in 1991 among the member countries of Argentina, Brazil, Paraguay, and Uruguay with a total population of nearly 200 million people and a combined GDP of $1 trillion. While both imports and exports are growing at healthy rate, imports into the member countries have been growing at nearly three times the rate of total exports. Common External Tariff (CET) rates have been established which will place the average tariff rate at 10 percent. The CET rates have been applied to about 90 percent of the goods imported into these countries with each country having an exclusion list. Future agreements with Mexico, Chile and Bolivia are in the works. The sheer size and political clout these countries have among Latin American countries have made them important to future trade agreements (INT, 1996).

G-3

Venezuela and Columbia signed a free trade agreement with Mexico on June 13, 1994 that established the G-3 agreement. The G-3 agreement addresses a number of issues including the protection of intellectual property and the scope of the agreement is almost as comprehensive as the NAFTA agreement (INT, 1996).

North America Free Trade Agreement (NAFTA)

NAFTA was established in 1994 with the member countries of Canada, Mexico, and the U.S.. These three countries have a total population of nearly 400 million and combined GDP of $8.0 trillion with an average per capita GDP of about $20,560. Obviously, NAFTA is an important economic region for any further negotiation of free trade agreements. NAFTA is in the process of eliminating almost all tariffs and trade barriers on North American industrial and agriculture products traded between the member nations. In addition, NAFTA addresses environmental and working condition issues. NAFTA is a highly important economic region for any further negotiation of free trade agreements.

While the Mexican Peso crisis created some setbacks for trade among the countries, it has recovered nicely and has shown strong growth among member countries and to the rest of the world. In particular, trade has increased seven-fold between Mexico and Canada since 1990 (INT, 1996).

Free Trade Area of the Americas (FTAA)

This trend continues as a trade agreement among 34 countries in the America's, referred to as the "Free Trade Area of the Americas" (FTAA), is currently under negotiation. In the two summits that have been held so far for FTAA, heads of state of each participating country has pledged to increase market openness, strive for a balanced and comprehensive agreement on a number of issues including tariff and non-tariff barriers for agriculture, investments, intellectual

property rights, government procurement practices, technical barriers to trade, safeguards, rules of origin, anti-dumping and countervailing duties, and sanitary and phytosanitary standards and procedures. These 34 states have agreed to complete the FTAA agreement by the year 2005.

The FTAA would provide for free trade stretching from Alaska to Cape Horn. FTAA is generally supported by the people as a Wall Street Journal survey of the people of both the U.S and Latin American suggests that 80 percent of those polled in the U.S and the Latin America say they support free trade (Schumacker, 1998). However, there is less support of the finer details of the agreement. Despite this fact, the past agreements and the change of public opinion has created momentum for a Western Hemisphere agreement that would reduce the trade barriers between North America and Latin American.

Summary

Exhibit B5-6 summarizes the changes that have occurred to a number of Latin American countries over the last couple of decades due to the agreements. Through the table, it is evident that restrictions in the form of tariffs have fallen substantially in the last couple of decades. While tariffs are not the only trade restriction, it exemplifies what is happening to the barriers to trade in general.

Regional trade agreements have contributed to the rapid increase of trade for the Latin American countries. Total trade as a percentage of the region's GDP now equals 36 percent, up from 18 percent in 1986 (INP, 1996, p. 3). Much of this increase in trade also can be attributed to regional integration.

MOTIVATIONS FOR A WESTERN HEMISPHERE REGIONAL TRADE AGREEMENT

There are motivations and incentives for North American countries (U.S. and Canada) and South and Central American countries (Latin America) to pursue a WHRTA. First the motivations for Latin American countries are:

1. Expand Trade with the U.S. – A WHRTA would give member Latin American countries access to the lucrative U.S. market, thereby expanding trade. Latin American countries rely heavily on trade with the U.S.. (Rajapatirana, 1994b).

2. Increased Trade Creates Jobs – Member Latin American countries will experience an expansion in jobs and income through industrial expansion (Rajapatirana, 1994b).

3. Get a Jump on Asian Competition - Latin American countries have similar competitive advantages to Southeast Asia in terms of labor and input resources and, therefore, a WHRTA would allow the Latin American countries to be competitive with the counties of Southeast Asia (Rajapatirana, 1994b)

Exhibit B5-6
PRE AND POST REFORM TARIFF RATES

Country	Year Pre-Reform	Post-Reform	Average Unweighted Legal Tariff Rates		Tariff Range Legal Tariff Rates	
			Pre-Reform	Post-Reform	Pre-Reform	Post-Reform
Argentina	1987	1991	42[a]	15	15-115[a]	5-22
Bolivia	1985	1991	12[b]	8	NA	5-10
Brazil	1987	1992	51	21	0-105	0-65
Chile	1984	1991	35	11	35	11
Columbia	1984	1992	61	12	0-220	5-20
Costa Rica	1985	1992	53[a]	15[a]	0-1,400[a]	5-20
Ecuador	1989	1992	37[a]	18	0-338[a]	2-25[e]
Guatemala	1985	1992	50[a]	15[a]	5-90	5-20
Honduras	1985	1992	41[a]	15[a, d]	5-90	5-20
Jamaica	1981	1991	NA	20	NA	0-45
Mexico	1985	1990	24[c]	13[c]	0-100	0-20
Paraguay	1988	1991	NA	16	NA	3-86
Peru	1988	1992	NA	17	0-120	5-25
Trinidad and Tobago	1989	1991	NA	41[a]	NA	0-103[a]
Uruguay	1987	1992	32	18	10-55	12-24
Venezuela	1989	1991	37	19	0-135	0-50

Source: Guasch and Rajapatirana.1994. *The Interface of Trade, Investment, and Competition Policies: Issues and Challenges for Latin America.* Working Paper, Washington D.C.: World Bank.

a Including tariff surcharges
b Import weighted average tariff
c Production weighted average
d Including tariff surcharges
e Ecuador also has a specific tariff of 40 percent on automobiles

4. Increased Investment and Technology Transfer – A WHRTA would increase the amount of investment attracted to these countries. Latin America is trying to recover from political instability, debt, and insufficient infrastructure. Through a trade agreement, greater investments into these countries may occur and create economic activity and greater stability through this direct investment (ECLA 1991).

5. Don't Want to Miss Out on Anything Big - NAFTA created preferential treatment to Mexico by the U.S. that may mean lost opportunities for other Latin American countries. Consequently, many Latin American countries are afraid of being left out in the cold from the recent NAFTA agreement and are expected to respond quickly to increased trade opportunities with the U.S. (Coes 1991).

6. It Has Worked Elsewhere - Asian countries have reduced their barriers and encouraged free trade. [8] Consequently, the Latin American countries are looking for similar type of success (Gwartney and Stroup, 1994).

7. Stronger Global Trade Leverage – A WHRTA agreement would allow a member Latin American country to have greater bargaining power than in a global trade bargaining like GATT (Rajapatirana, 1994b).

For Canada and the U.S., the incentive to join in such an agreement may not have the same explicit benefits that can be seen in the Latin American countries. However, the benefits are just as significant.

1. Larger Markets - A trade agreement that reduces the trade barriers would create a larger market for Canadian and U.S. producers (Edmund, Moomaw, Olson, 1994).

2. Lower Costs and Improved Efficiency- Inputs and components imported for the production of U.S. and Canadian goods could be significantly reduced will lower tariffs. Moreover, it would allow greater specialization for Canadian and U.S. companies. Producers could strategically locate plants across various countries to take advantage of comparative advantages across these countries. This would increase profits and increase overall production while reducing the cost of the goods in which they produce (Parkin, 1997).

3. Increased Welfare - Consumers would benefit through lower prices of goods which would increase their consumer surplus. Lower prices would mean that consumers would have an increase in disposable income that they could use for other goods. Increasing their bundle of goods would in turn mean that producers would have to produce more of all goods, which would mean an increase in employment (Gregory and Ruffin, 1989).

Obstacles

However, for a WHRTA to be reached, a number of obstacles would have to be addressed. Each country would have to deal with the political pressure of lobbyists which have strong arguments against a WHRTA. Politically powerful lobbyist such as labor unions, environmental groups, and other lobbying groups have well founded messages with a broad appeal that cannot be ignored. For example, specific industries will be hurt substantially. In one example, a study has projected that job losses may range from 72,000 to 255,000 over a 10 year period for the textile and apparel industry if complete trade liberalization would come about (GOA/GGD-94-83b 1994).[9] In addition, many in the U.S. are skeptical about the positive impacts that a free trade agreement with Latin America would have for the U.S.

[8] The late 1990's crisis in Asia is largely financial, rooted mainly in over speculation. Asian trade continues to flourish.

[9] However, for each apparel job protected, the cost to consumers is approximately $139,000 in higher apparel prices (Hufbauer and Elliot, 1994).

Their issues and concerns will have to be addressed and accommodated if a regional free trade agreement is to succeed. An article by Lawrence and Litan (1986) suggests that a successful trade agreement should phase out trade barriers over time and that individuals who are significantly hurt by free trade agreements should be provided trade adjustment assistance or financial compensation. Policy tools, such as "Fast Track," could be a significant step towards overcoming these internal politics in the U.S.. In addition to the internal political difficulties of each country, the logistics of gaining a mutual agreement among this many countries create another obstacle for a WHRTA.

Despite these perceived obstacles, momentum has been created for an RTA that includes both Latin American and North American countries that would be more inclusive in the industries that it would cover.

OTHER TRADE CONSTRAINTS

The preceding discussion focuses upon a host of trade-related measures which traditionally are employed by governments to protect industries, raise revenues and counter barriers imposed by other countries.

There are other things which also act as a deterrent to trade and, therefore, can be construed to be a "trade constraint or barrier." Examples are as follows:

- Aircraft landing right agreements constrain which international airlines can operate out of various airports.

- Trade lane protection laws such as the Jones Act limit the ability of foreign flag vessels to call at multiple U.S. ports.

- Trade embargoes, specifically the U.S. embargo on trade with Cuba, are a significant constraint.
  - The Helms-Burton Act, enacted in 1996, continued the embargo and gave U.S. individuals and companies the right to sue for property they lost when they fled Cuba following Fidel Castro's takeover in the early 1960s.
  - The U.S. is virtually alone in its embargo on trade with Cuba.

- Procedures and facilities at international border crossings hinder cross-border trade.
  - For U.S. exports, this involves both the Maquiladora trade just across the Mexican border as well as shipments to the Mexican interior.
  - NAFTA reduced some paperwork and opened up trade by reducing or eliminating certain duties.
  - Two programs are underway to make the necessary inspections less time-consuming and, in some cases, less damaging to vehicles and cargo. The North American Trade Automation Program is intended to facilitate information exchange and process automation. The Non-

Intrusive Inspection program is intended to allow more thorough inspections without the delays now caused by unloading of cargoes, etc.

- Physical facilities at border crossings sometimes are inadequate and the process to add facilities can be daunting. For example, to build a bridge across the Rio Grande can require filings with more than 25 government agencies in Mexico and the U.S.
- In the past, some freight trains have been backed up all the way to Kansas as they waited to squeeze through one-track border crossings.
- Mexican trucks entering the U.S. currently are limited to a narrow commercial strip along the border. While NAFTA provisions would have allowed Mexican carriers full access to Arizona, California, New Mexico and Texas beginning December 1995, the U.S. has delayed implementation, citing concerns about Mexican trucks failing to meet U.S. safety standards. Also, the Teamsters Union and the Owner-Operator Independent Drivers Association have aggressively opposed opening the border.
- Mexico has limited the opportunity of U.S. carriers to travel south of the border by banning 53-foot trailers except when used with the unconventional cab over tractor that is seldom utilized by U.S. truckers.

- Multi-shipping line partnerships and the emergence of large container vessels mean greater concentration of cargo at a small number of “hub” ports. In the absence of advance planning and congruent infrastructure improvements, hub ports will experience traffic congestion which will affect trade flows. Also, a feeder system and/or adequate intermodal connections will be required.

- While it is common practice in many foreign ports to operate on a 24-hour day, labor agreements in the U.S. restrict operating hours, thereby limiting the productivity, efficiency and capacity of U.S. ports.

- U.S. ports typically do not have dual-hoist cranes and existing cranes are not capable of the 18 container reach that is associated with ultra large container vessels.

- Although there is a significant move to privatize port operations in Latin America, resistance is encountered from port workers who fear the loss of their jobs. Current work rules guarantee them their jobs, whether there is work to be done or not. Rules which force port operators to employ more workers than they need drive up costs.

- Strikes have been held at some Latin American ports over matters such as more pay, better benefits, safer working conditions and job security in the face of coming modernization. This has led to virtual stoppage of cargo flows at times.

- Cargo security is a major issue that affects trade flows and increases the cost of insurance.

- For instance, the Maritime Security Council has reported a major problem of cargo being hijacked, stolen or otherwise taken illegally from U.S. waters or ports.
- Piracy is a reported problem in Latin America. Pirates have been know to buy cargo manifests from stevedores and the black market as a means of identifying the best targets. Stolen goods are sold on the black market, often to people who are appreciative of being able to buy imported goods at prices they can afford. Consequently, pirates are sometimes seen as "good" people.

- Transportation infrastructure in Latin America often is inefficient and inadequate. The move towards privatization is helping improve conditions. Nevertheless, it will take time for major improvements to be implemented.
- In the U.S., transportation infrastructure also has many challenges. The investment needs for facilities important to trade with Latin America require a large investment in the period to 2020, as noted in Section D of this report.
- Port expansion and channel deepening are problems at various locations in the Alliance Region.

- Likewise, improvements will be needed in the Region's airports if they are to cope with the increase in international trade flows which this study has forecast.

- Although an analysis of railroad improvements was not undertaken by the study because of the private-sector ownership of most railroads, constraints are apparent in the system of railroads that serve Latin American trade flows.
  - An example is the lack of vertical clearances to accommodate double stack containers such as on the Gulfport to Hattiesburg railroad.

- By far the greatest infrastructure needs identified by this study are for the Alliance Region's highways. If these highways are not adequate to handle traffic flows (both domestic and international), this will negatively impact the Region's trade opportunities with Latin America and other trading partners.

- U.S. environmental regulations limit opportunities to implement enhancements to the transportation system.

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SECTION B6
BUSINESS DEVELOPMENT OPPORTUNITIES

This study makes a clear case that the Alliance Region is the gateway for U.S. trade with Latin America, as well as to other global markets. Aside from the obvious strategic significance of the LATTS Transportation System to economic development and trade within the Alliance and elsewhere in the United States, this presents significant business opportunities for the Region.

As trade with Latin America and the rest of the world grows over the next twenty years, so will the amount of trade that passes through the Alliance Region. This trade passing through the Alliance presents a business development opportunity for the Region.

TARGET THE INCREMENTAL GROWTH COMPONENT

The Alliance is one of the fastest growing industrial regions in the nation. Lower production and investment costs, as well as other advantages, has resulted in a robust industrial and high tech investment climate in Alliance states. The incremental growth component (above current levels) in future trade passing through the Region represents additional production capacity that has not been invested (**Exhibit B6-1**). Because capital is free to flow to any location in the United States, the jobs and private investment dollars associated with additional trade can go anywhere in the U.S.. Although the forecasts produced by LATTS generally follow the same patterns as historical trade patterns[1], these patterns can change due to a variety of reasons, including trade policies, mode diversion polices, changes in transportation costs across modes, changes in production costs, or aggressive industrial recruitment programs (incentives).

This section of the report focuses on the growth component of the LATTS forecast to identify business development opportunities for the Region.

GROWTH IN EXPORTS PASSING THROUGH THE ALLIANCE REGION

Although any form of trade generally creates jobs and investment, exports present a rational business development target. Exports typically offer the greatest potential for job creation, particularly exports passing through the Region (pass-through exports) that are produced elsewhere in the U.S.

Alliance exports are expected to grow from a current level of approximately 290 million tons to 660 million tons in 2020, an increase of 370 million tons. This represents over $610 billion in value in 2020. (**Exhibit B6-2**)

[1] Changes in trade patterns for the LATTS forecasts (for Latin America and other World Regions) are based on economic based trends in domestic and international production and consumption. However, the LATTS forecasts were not reallocated among gateways (ports, airports, border-crossings) or among origins and destinations based on above-trend scenarios (e.g. due to wholesale mode shifts, trade policies, etc). The"High Trade" scenario is based on more aggressive assumptions about trends. Trade patterns were not reallocated.

Exhibit B6-1
INCREASE IN PASS-THROUGH TRADE REPRESENTS A BUSINESS OPPORTUNITY FOR THE ALLIANCE

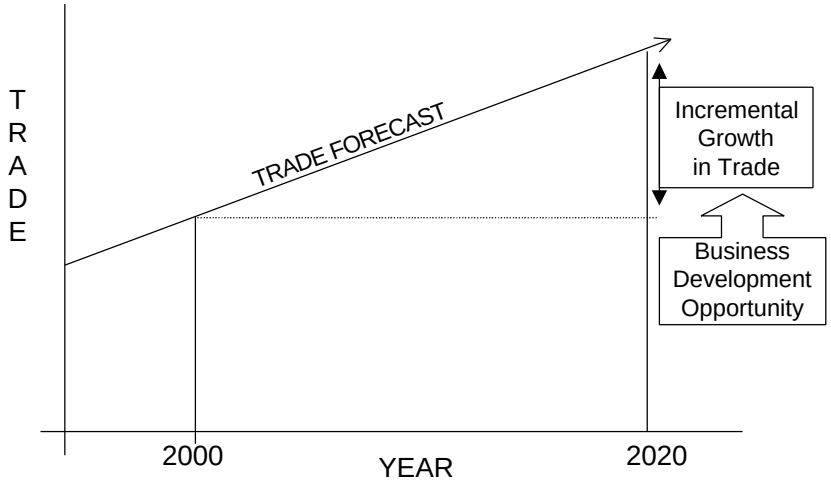
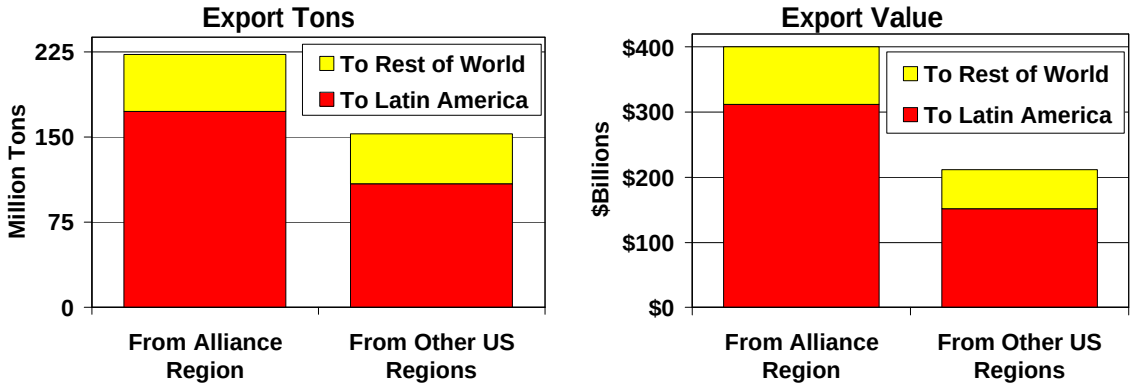


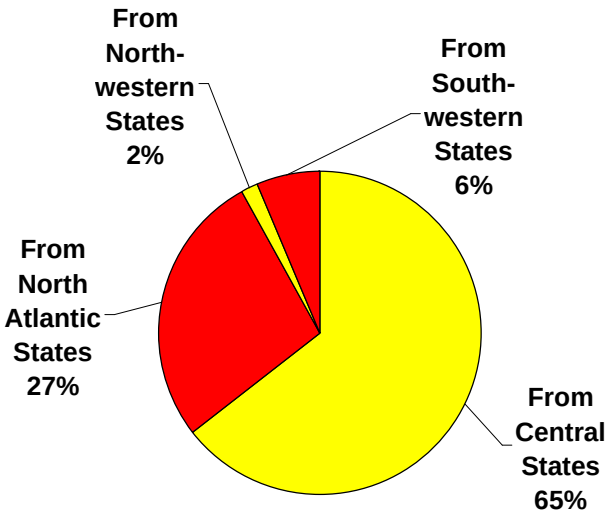
Exhibit B6-2
NET INCREASE IN FUTURE EXPORTS THROUGH THE ALLIANCE



Domestic Origin/Destinations

Based on current patterns, over forty percent of the increase in export tonnage (153 million tons) is expected to originate in other U.S. states, representing over $210 billion in export value passing through the Region. The majority (65%) of this pass-through export growth is from the Central States (Midwest). Another 27% is from the North Atlantic states (**Exhibit B6-3**).

Exhibit B6-3
ORIGIN OF EXPORTS FROM OUTSIDE THE ALLIANCE
(NET INCREASE IN FUTURE EXPORTS THROUGH THE ALLIANCE)

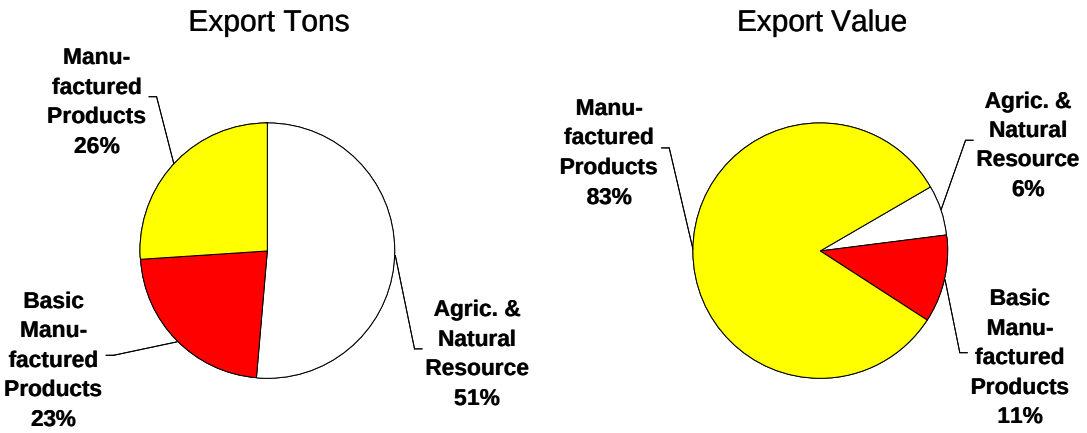


Export Sectors

An evaluation of the specific export sectors reveals that half of the tonnage (51%) of the pass-through export growth are agricultural and natural resource products (bulk products), specifically farm products (grain) and non-metallic minerals such as phosphates. The other half of the tonnage are expected to be basic manufactured products (chemicals) and manufactured products (food products, transportation equipment, machinery and industrial equipment, pulp and paper, electrical machinery, and fabricated metals, other). (**Exhibit B6-4**)

From a value standpoint, over 80% of the pass-through export growth component is expected to be manufactured products (machinery and industrial equipment, transportation equipment, electrical machinery, food products, rubber and plastics, fabricated metal products, instruments, and other). These types of exports are typically associated with high paying jobs.

Exhibit B6-4
MAJOR EXPORT SECTORS THAT PASS THROUGH THE ALLIANCE
(NET INCREASE IN FUTURE EXPORTS THROUGH THE ALLIANCE)

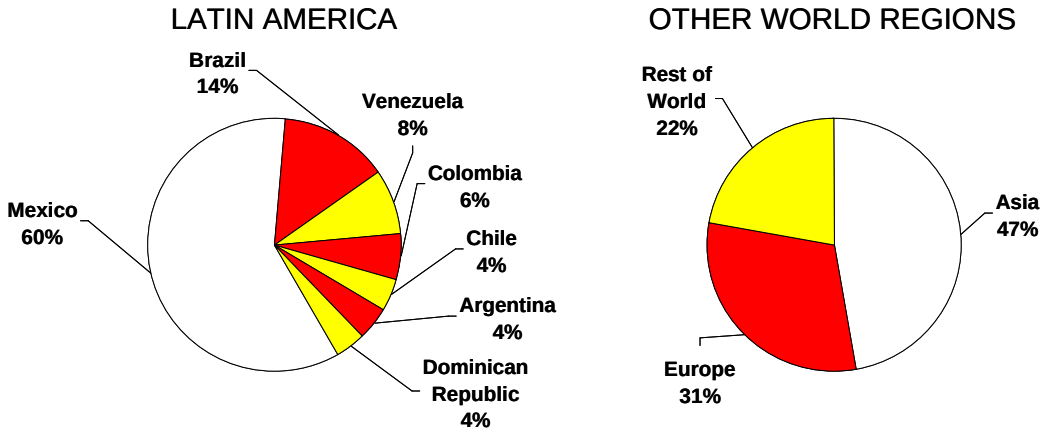


Eleven percent of the value of the pass-through export growth component are basic manufactured products (chemicals), and the remainder are agriculture and natural resource products (farm products, non-metallic minerals, metallic ores, forest products and coal).

Global Export Markets

It is forecast that over two-thirds of the growth in pass-through exports will be to Latin American, particularly Mexico, Brazil, Venezuela, Colombia, Chile and Argentina, with the remainder going to other global markets like Asia and Europe (**Exhibit B6-5**).

Exhibit B6-5
FOREIGN MARKETS FOR EXPORTS THAT PASS THROUGH THE ALLIANCE
(NET INCREASE IN FUTURE EXPORTS THROUGH THE ALLIANCE)



AN OPPORTUNITY FOR THE ALLIANCE

It is clear from the data that while half of the future growth in pass-through export tonnage is grain from the central region states (Midwest) and other bulk materials, a dominant share of the value of the pass-trough export growth are high value manufactured products, specifically manufactured (value-added) exports from the Central Region. While grain production is essentially a captive industry (not footloose), the value-added exports represent yet to be created jobs and private investment dollars that could well be attracted to the Alliance Region.

THE ALLIANCE NEEDS TO REMAIN COMPETITIVE

It is important to point out that the export forecasts for the Alliance Region (exports produced in the Region that are shipped through Alliance gateways) are comparable to the previously discussed pass-through exports – high value manufactured products. Moreover, the jobs and private investment associated with these exports have not yet been invested, despite being shown by the LATTS forecasts as being produced in this Region. The jobs and private investment dollars associated with additional trade can go anywhere in the U.S..

The Region's ability to actually attract the jobs and private investment dollars is based on its overall competitiveness. Competitiveness is a function of a variety of factors, one of which is transportation – multimodal transportation facilities (modal choice), transportation services (quality and reliability) and transportation costs. Developing and sustaining a reliable multimodal trade transportation system is a key step towards competing for the business opportunities outlined herein.

LATIN AMERICAN EXPORT MARKETS

Latin America offers significant export opportunities for the Alliance states. However, each Latin American country is unique. The following is a summary of economic highlights for specific Latin American countries. Further discussion of business opportunities with Latin American countries is contained in Appendix II.

- ***ARGENTINA***
  - Recent economic reforms have set the stage for stable economic growth in the medium term; real GDP growth will average 5.1% over the next 23 years.
  - With the highest nominal GDP per capita among Latin American countries and continued strong growth, Argentina has strong market potential.

- ***BAHAMAS/JAMAICA***
  - The combined economy of the Bahamas and Jamaica will grow at an annual average rate of 2.6% over the forecast period.

- ***BOLIVIA***
  - Economic reforms will enable Bolivia to achieve strong real GDP growth in the short term, after which it will moderate to an annual average growth rate of 5.1% over the forecast period.
  - Bolivia is one of the poorest countries in Latin America. Strong GDP per capita growth will begin to improve the situation.

- ***BRAZIL***
  - While economic stabilization has brought the economy under control and growing at just over 4%, it remains on uncertain foundations.
  - Brazil represents one of the largest Latin American markets, with one-third of Latin American population and over 20% of all Latin American trade.

- ***CHILE***
  - Chile is forecast to have the highest GDP growth rate among Latin American countries, at 5.6% annually through 2020.
  - Chile continues to expand trade liberalization

- ***COLOMBIA***
  - Colombia ranks second in real GDP growth in Latin America, averaging 5.3% through 1997-2020.
  - Membership in several trade agreements will support trade growth of 8.5% through the forecast period.

- ***CUBA***
  - Cuba is recovering from the deep recession induced by the loss of Soviet aid. Annual economic growth of 2.3% is expected over 1997-2020.
  - Tourism has become the most important sector in Cuba.
  - Exports are forecast to grow strongly as economic reform eases trading practices.

- ***DOMINICAN REPUBLIC***
  - Real GDP growth will average only 2.1% annually through 2020.
  - Extremely low incomes and a nominal GDP per capita growth that lags inflation limit consumer market potential.

- ***ECUADOR***
  - Economic concentration in natural resources and political instability limits growth to 3.9% through 2020.
  - With slow nominal GDP per capita growth and high inflation, GDP per capita levels will remain low.

- ***FRENCH GUIANA / GUYANA / SURINAME***
  - These three countries, dependent on agriculture and mining, will experience relatively slow economic growth over the LATTS forecast period.

- Evidence of French Guiana's French department status is seen in its high GDP per capita, while its neighbors are among the poorest in the region.

- ***HAITI***
  - Extreme poverty, lack of economic reforms, and political quagmires hold growth to an average 1.3% over the forecast period.
  - Haiti is dependent on imports of food and manufactures, two-thirds of which come from the U.S.

- ***MEXICO***
  - Mexico is almost completely recovered from the peso crisis in 1994, and economic and political practices position it for stable, sustainable growth in the future.
  - Mexico's membership in key trade agreements and rapid growth in trade will propel it to account for almost half of all trade in Latin America by 2020, more than double its share of population or real GDP.

- ***PANAMA***
  - Panama ranks fifth in economic growth among Latin American entities, with an average annual growth rate of 5.0%; however, this may be threatened by increasing political risks in the short term.
  - Panama has positioned itself as a key re-exporter of manufactured goods, pushing up nominal export growth to a leading rate of 12.6% per year.

- ***PARAGUAY***
  - Economic reforms and integration within Mercosur contribute to an average annual expansion of 4.9% in the economy.

- ***PERU***
  - Substantial improvements have been made in Peru's economic growth and inflation, but Peru still faces high medium-term risk to continued achievements.
  - Extremely slow growth in nominal GDP per capita will drop average income in Peru to fourteenth place in Latin America by 2020.

- ***URUGUAY***
  - Recent political and economic restructuring in Uruguay have brightened its economic outlook, for a forecast average of 4.5% in GDP growth over the next 23 years.
  - Nominal GDP growth per capita ranks fifth among Latin American entities, growing at a pace of 6.9%.

- ***VENEZUELA***
  - As Venezuela lags most other South American countries in economic liberalization, only moderate GDP growth, 4.2%, is forecast for the next 23 years.
  - Oil continues to dominate government revenues and exports.

- ***OTHER CARIBBEAN ECONOMIES***
  - Economic growth will continue at an annual average pace of 2.5% over 1997-2020.

- ***OTHER CENTRAL AMERICA ECONOMIES***
  - Combined, Central American countries have among the lowest GDP per capita levels in Latin America.
  - GDP growth is forecast at a slow pace of 1.7% over the forecast period.